

Author: Pennsylvania farmer

Title: Pennsylvania farmer, vol. 103

Place of Publication: Meadville, Pa.

Copyright Date: 1930

Master Negative Storage Number: MNS# PSt SNP aAg219.2

**FILMED WHOLE OR IN
PART FROM A COPY
BORROWED FROM:**

Rutgers University

**FILMED
AS
BOUND**

Volume 103
1930

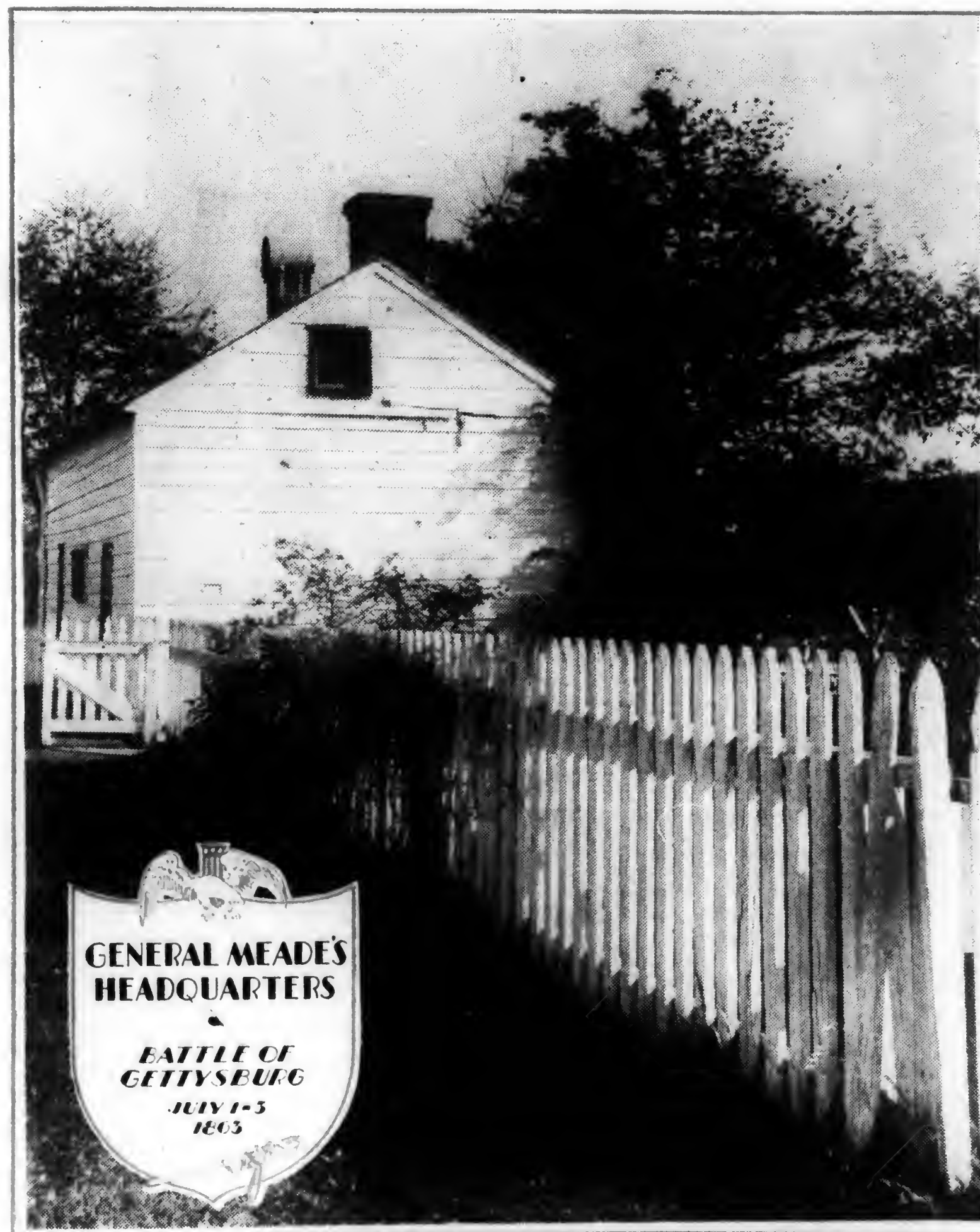
PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

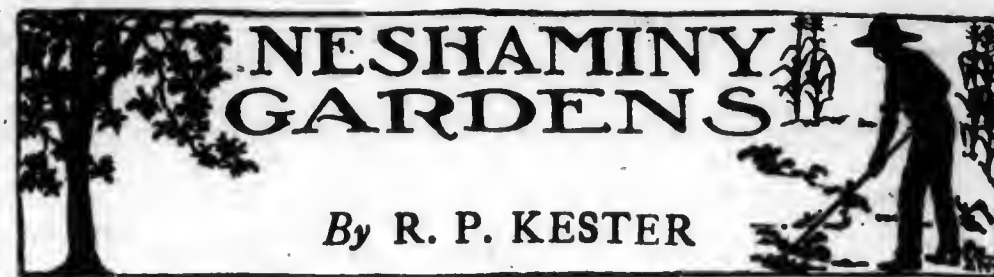
July 5, 1930



Philadelphia

Pittsburgh

Harrisburg



By R. P. KESTER

Measure feeds

by the yardstick of prof-

its and you will buy

Park & Pollard feeds.

Our Growing Feed insures
quick growth and sturdy birds.

Dependable Feeds for Every Purpose

Poultry Feeds: Lay or Bust Dry Mash - Red Ribbon Scratch - Growing Feed - Intermediate Chick Feed - P & P Chick Scratch - P & P Chick Starter - Dairy Rations: Overall 24% - Milk-Maid 24% - Bet-R-Milk 26% - Herd Health 16% - Milkmaid Call Meal - Other Feeds: P & P Stock Feed - Bison Stock Feed - Go-T-It Pig and Hog Ration - Pigeon Feed - P & P Horse Feed - Pocahontas Table Corn Meal.

I HAVE been thinking for some time of writing a few articles in an effort to show the change in the Spirit of Agriculture that has taken place during the last fifty years. Perhaps that expression is not quite clear unless it is understood that the term "agriculture" includes the people engaged in the business of farming, and everything connected in any way with rural life and rural interests. Writers and speakers have established well the meaning of "spirit" as applied to an age, a generation, a business or a country. But little has been said about the spirit of agriculture and agricultural people. Yet I know of no business or class of people which has, or has had, a more definite spirit, even though it has at times been suppressed.

I have hesitated somewhat in beginning such a series for two reasons: First, because it will necessitate the use of a good many "I's," "me's" and "my's," and, secondly, because it will be in the nature of a retrospection, and it is said that when a man begins to think of the past it is a sign he is getting old. (There I go again. Remembering the slap on the wrist administered by Howard Mitman I will change that to "getting older.")

I was not old enough fifty years ago to talk about, think about, or even recognize the "spirit of agriculture" as it was then; but I remember facts and conditions of that period sufficiently well to understand and interpret them now. In every life, however humble it may be, there are certain outstanding events which mark the way like mile-posts, and while they may be relatively unimportant in themselves they are indicative of the age in general. In fact the life of every one is an epitome of all life. I remember a remark made by a fairly well known writer of fiction some years ago when I told him that I had often wished I lived in a more favored locality where I could find themes for novel writing. He said: "It doesn't depend upon where you live. It depends entirely upon how well you use your eyes and your imagination. In every life and every community there are countless opportunities for story writing."

The thing I want to do in this series is to portray (if I may be favored with words to convey the feeling that is in my soul) the impulses, ideals, purposes and expectations of our grandfathers with the same characteristics that exist in the lives of the rural people of 1930. After giving these excuses, apologies and explanations as a sort of prelude, let us turn back fifty pages to 1880.

The farm on which I was raised from two years of age lies on the western foothills of the Alleghany Mountains. The soil of that region belongs to the De Kalb series. The De Kalb soil is not naturally fertile when compared with some others, although it comprises far the largest acreage in the state. Six miles west of my home was a dividing ridge. I well remember the thrill I had when, after getting my primary lessons in geography, father showed me a school house out there and told me that the water which fell from the west side of the roof of the house ran into the Gulf of Mexico, and that from the east side finally got into the Chesapeake Bay.

The little trip out into the "wilderness" when father told me this momentous fact in geography is as good a place as any to start to tell of the spirit of the age. As soon as little boys were big enough to go with father,

and that was pretty soon, they were taken along. Journeys were slow and the little folks provided company. Fathers were considered sages and were pried with questions about everything along the way. Even when working in the fields fathers had the company of the little folks. I can remember walking miles in the furrow back of father as he plowed. Once in a while he would stop the team to "wind" and he would sit down on the plow handles while he answered the questions I had thought up. I remember that he usually "rested the horses" at the farther end of the field so that passers-by could not catch him sitting down. I early learned that it was considered a sign of laziness to "rest" while at work.

DeKalb soil with its close, clayey texture and tight subsoil dries out slowly in the spring. I have seen father plowing in level fields when he had to step out on the "land" in low places because the furrow would be partly full of water as he came around each time. Of course, land plowed in this condition would dry extremely cloddy and it was sometimes impossible to put it in good condition with the harrows available. While speaking of this type of soil I want to step forward a few pages and tell what was done to it when some agricultural knowledge had sifted through.

Big Crop Was an Event

Fifty years ago State College had not, of course, made any scientific demonstrations with DeKalb soil. But I remember that "Charlie" Cleaver, an old neighbor said to father: "Lewis, that land needs lime. I have a lot of the same kind of land. Last year, I hauled lump lime fourteen miles, and spread it on after it slacked, and now have the first decent crop of hay I ever had." As soon as father could get enough money to do that he also limed a field. But there was something else. Water should never stand in the furrows when being plowed. Tile was bought and that particular field was drained. That made it drier, but there was still something lacking. Corn and grass grew indifferently. An uncle had taken the agency for "phosphate" as all commercial fertilizer was called. Father bought some "acid phosphate" and applied it to his corn crop. Presto! A big crop of corn, and a big crop of oats.

Now that sounds simple. But back in those days it was an event. Only by the cooperation of neighbors in telling each other of their experiences was farming improved. Several years passed while the above developments were being made, but the rest of the farm was improved more easily afterwards. Some neighbors prophesied dire results from using the "phosphate," but the results proved its effectiveness. The corn rows were so long that the little one-horse corn planter with fertilizer attachment which father used would not hold enough phosphate to plant a whole row. The little, stunted corn at the ends of alternate rows proved conclusively the value of "acid phosphate" on DeKalb soil.

But I have deviated far afield in this first article, and will start back at the beginning again next time.

To Save a Man

WHEN one is plowing and has no help he can work with a single row walking plow and a riding plow by himself and get along. Walk behind the one and let the other follow. While turning one team and then the other the horses get a little rest each time.

Paul V. Goulden.
Frederick county, Md.

More Readers on Farms in Pennsylvania than Any Other Farm Paper

PENNSYLVANIA FARMER
Published Weekly
Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of Mar. 3, 1879.
PUBLISHED EVERY SATURDAY BY

CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., July 7, 1930

No. 1

Continuing the Case of Mike and Joe

The Problem of Agricultural Supply and Demand as a Monongahela Valley Farmer Sees It

By WAITMAN DAVID

DO fluctuations in the earning capacity of hundreds of thousands of workers in the industrial and mining regions of the East affect the demand for farm products and the prices they will bring? Let us attempt to answer that question by continuing the story of Mike Finnegan and Joe Krusniewski we began last week.

After the mills and mines shut down and Joe has taken a couple of weeks to "drink litty bit" I will find him up around the barn some morning. "Good morning, Mr. Farmer Boss. Mebbe you got some kinda job for me this time?"

"What's the matter Joe? Got vacation now?" "Yes, pit she shut down. Boss say mebbe six, eight months this time. No got order for steel that mill for Pizburgh this time."

"Well, Joe, you know I never put out only what I can tend to myself with a few boys to help when school is out. You know it wouldn't pay me to put out more. If I did, about the time I needed help everybody would be making lots of money in the pit and wouldn't work on a farm. Who's your buddy?"

"Coupla Kegs Moonshine"

"Sure, I versteh that all right. This fellow she my cousin. E's work for Pizburgh that place makin' brake for railroad wagon. No got job that place this time. Lots a men lay off. This fellow he come visit me litty bit. Plenty versteh that building wall for stone. You say you fixin' new wall for barn pretty soon. She's versteh all right. Me versteh mixin' that mud. I think mebbe you like do that job this time?"

"No, Joe, I'd like to get that job done all right but I haven't the money this year."

"You no need too much money. Is no got work some place this time, you give eat, my cousin work this time for two dollar for day, I mixen that mud, help him litty bit; you give me dollar for day. You no must pay me cash money. I like some potatoes you dig 'im out. Mebbe like some corn, some veat for that chicken after while."

"Where's your brother Andy? He don't come for corn any more."—You have to see that grin to get it.

"Andy no here this time. You know Andy work for heading. Is lay off mebbe two months now. He no got job. He pickin' that plums for one farmer half in half. He cookin' coupla kegs moonshine for that plums. Right away come one constabla, two policeman. Is no see Andy. He stay for that place got lotsa tree close for railroad. No catch nothing that policeman. Andy scare for that business. Is catchen before, judge say Andy again make moonshine for two year, right away go for jail mebbe one year. Andy go for Vest Virginia some place makin' big dam for river look for job."

"You like some moonshine? I talk for Andy woman. That plums make good moonshine I bet you."

"Well, mebbe, Joe. Where's the boys?"

"They got that place building new road look for job. Must catchin job that boy. He already pay more five hundred for that ottomobile. Must pay for three more time. No pay that fellow come take ottomobile, boys loose everything."

"Well, I'll tell you, Joe. If you want a job setting posts for fence, I'll give you a dollar and a half and two meals for a couple of weeks. You come out Monday. I'll have to buy a shovel first."

"Sure I come. I versteh that job all right. I bet you pay anyhow dollar seventy-five for shovel. That fellow for Vall Street make everything high for farmer for workman this time. No pay too much for diggin that coal. That fellow make everything for self. Is makin' that law for Prohibition. I bet you he got lotsa for drink. No moonshine either, I bet you. He is got lotsa good viskey for self. Policemen no go for his house he drink litty bit, like for sing."

"What do you know about Wall Street. Joe?"

Can Weed Sixty-Five Acres of Corn a Day



This picture wasn't taken "out west." The new six-row weeder outfit is at work in the corn field on the Bauer farm, Westmoreland county, Pennsylvania. Mr. Bauer believes in labor-saving equipment indoors as well as in the fields. His dairy and home are among the most completely electrified in the state.

"O, I plenty versteh. Come one big fellow from court house last time for voting. Is versteh plenty that fellow. He tell me how do that fellow for Vall Street. Well, I come do that job for you. I got litty bit money for bank. No good spendin' that. I like work an make enough for eat anyhow. Mebbe no start that pit I no buy that piggy I talk you before. Mebbe no got money."

"That's all right, Joe. You go on take your pig when I butcher. You can pay me some on pay days when you start to work again. I'll look for you Monday."

The Whole Valley a Huge Glow Worm

And so Joe's purchases of food products through the organized channels will drop from around \$250 a month to practically nothing, as will that of thousands of other industrial workers in our valley.

You have to live with these people to see and know the effect of hard times on the demand for farm products. The eastern farmer knows; the retail grocer knows. They are close to these people.

Fifty years ago this whole valley was chiefly agricultural save a small section around Pittsburgh and up the lower Youghiogheny. It was chiefly a self-contained agriculture each community marketing what little it raised above its own needs to Pittsburgh by the river or over the mountains on the hoof.

Then in the nineties came the great industrial

expansion in steel. Giant new mills were built one after another in the lower valley. Factories sprang up around them for processing their product. Mines were opened to supply coal and coke till at night the whole valley almost to the West Virginia line resembled a huge glow worm.

Hundreds of thousands of workmen came from northern and southern Europe by the shipload; colored laborers from the South; others from everywhere. In a year a farm was turned into a mining town of from six hundred to two thousand inhabitants. In ten years river hills were transformed into thriving cities of from four to ten thousand inhabitants. What a great chance for the farmers, you may say. An unlimited demand right at their door.

But there were other influences at work. Many farmers sold the coal underlying their farms for more than they ever dreamed their farms were worth. Many moved to the towns to give their children an education. Some remained on the farms. But why farm when there was a steady demand for teams and still more teams in the construction of mines and mining towns at higher wages than any one had ever dreamed of making farming, and with pay day regularly every two weeks?

Why Work on a Farm?

What young man or able-bodied laborer would think of working on a farm when there were always jobs open at higher wages and shorter hours? Many of the farms were rented and farmed on the side by people looking for a place to live while they worked at the mines. Soon they were cropped out and the soil soured. This kept on till the bottom was reached in farm production about the end of the war when probably the lowest percentage of the demand for agricultural products in the valley was supplied locally.

And then everything stopped. Mills and mines went down. Did the western farmer feel this slackening of demand? Did the steel worker with a good bank account or the miner with a sheaf of Liberty Bonds keep on consuming as much as when he was working? Is not that period alone enough to show any farmer the futility of expecting to profit by holding his products longer than for the time necessary for distribution before another year's crop? We in the East, at least a large majority of us, have not been convinced otherwise yet.

Many of the farmers in our valley who suddenly found themselves out of work and with their farms run down began to see the possibilities of supplying this local demand for agricultural products and began to get back on the farms and build up some production. Many of the foreigners with centuries of farming back of them began to buy up farms and try their hand. Then along came the general coal strike; many miners bought farms.

This small movement back to the land was not felt at first. It took several years for the miners to produce enough for themselves. But each year they are producing more for market. The mines and mills have never reached a production where their pay rolls amounted to what they once did. They probably never will again, but the production of farm products is steadily increasing.

The next five to ten years will see our local production of farm products at least doubled. The (Continued on page 17.)

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published Every Saturday by
CAPPER-HARMAN-SLOCUM, INC.
7301 Penn. Ave., Pittsburgh, Pa.

President: Arthur Capper
Vice-Presidents: T. D. Harman, Geo. M. Slocum
Manager: New Lins

EDITORIAL STAFF
Editor-in-Chief: E. S. Bayard
Editors: C. L. White, M. C. Gilpin
Field Editors: Miles Horst, G. W. Harris

EDITORIAL OFFICES
Harrisburg Philadelphia

CONTRIBUTING EDITORS
R. P. Keeter J. G. Lipman
Alva Agos H. C. Kandel
L. V. Light H. L. Schaefer-Hansen
R. C. Blasingame A. A. Dordner
J. P. Shigley S. W. Fletcher
W. D. Zinn Mrs. Gertrude Stewart
F. L. Bentley Gilbert S. Walte

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for livestock and classified advertising. No deceptive, immoral or swindling advertisement inserted at any price.

Member Agricultural Publishers' Association,
Audit Bureau of Circulations.
Volume 193, No. 1 Established 1877

FROM EXPERIENCE

NOT long ago we sat in a meeting of fifteen leading business men in a great city. Of these only two knew anything about the Agricultural Marketing Act or the powers it confers on the Federal Farm Board. One of these two was a slaughterer, the other was a baker, and both were naturally interested in agriculture. Can we find as many farmers, leaders in their business and in their community, who know nothing about any legislation of importance, let alone that which is different from anything in the past history of our country? We have found, in many years of experience with both, that farmers are better informed about public affairs than city men are.

CHANCE FOR DEBATERS

HERE is a rare chance for those who want to discuss things. The American Institute of Cooperation, held at Columbus, Ohio, devotes the week beginning July 7 to sessions at which free discussion is permitted. If a talented discussor can't have a fine time that week, with six members of the Federal Farm Board and many others to start him, we don't know where to send him. Even this program might be made more interesting, however. For instance it might be livelier if J. F. Walker were to tackle "the relation of the wool cooperative to the national wool marketing program" instead of leaving that subject to a gentleman from the Pacific Coast.

CHEAP SHEEP

WHILE prices for all livestock have gone away down the price of sheep has come the nearest to zero. Good fat sheep have sold recently at \$3@4 per cwt. in principal markets and they are not in much demand even at such low figures. Do consumers really want cheap meat? If they do they can get it in wholesome and delicious mutton. But consumers prefer lamb even at three or four times the cost of mutton and they are likely to continue to prefer it. The slump in sheep, lambs and wool brings to producers an old question, which has been answered many times and always the same way. What is the best course to follow when depression hits the sheep business? At every past period of this kind the wise men have held on to their flocks and improved them while the other fellows added to the demoralization by

selling out at any price. It is likely to be the same way this time. Before giving away a productive flock try to find out how many men are in the poorhouse because they stuck to sheep through foul weather and fair.

A PLANTER OF TREES

A SUBSCRIBER for more than fifty years writes an interesting letter from which we quote: "Your paper has helped me in many ways to make our success. The word 'our' in this case means my wife, my son and his wife and our little granddaughter. We are all partners in the running of this farm. All have bank accounts and all are interested in making a real place to live. Our hobby is maple sugar and syrup. At this time we have thousands of young hardwood trees coming on and are transplanting as fast as we can to thin them out, and will restock with trees all land not good for the plow." What would be the effect on agriculture if all owners of unproductive land should prepare to produce sugar, nuts and lumber by planting trees?

WOOL POLICIES

A READER wants to know why American wool growers should not unite and market their clip through one organization. There is no reason why they should not do this if they think it is the best way. There are now many useful and successful wool marketing organizations, big and little, and it is their privilege to unite in one body for marketing or any other legitimate purpose. If they want to operate through one agency or a dozen agencies, that is their business. No organization is compelled to go into the national body, nor is any grower compelled to join or patronize any organization. Some cooperatives have joined the national organization and some have not, and the same is true of individuals. What the wool trade opposes, and its objection is natural, is discrimination in favor of cooperatives whereby they are financed by public funds at lower rates than are available to others in the same business. The wool trade says that cooperatives are entitled to equal opportunities but not to special favors. The cooperatives aver that the wool trade would take all it could get and not worry about discrimination if it worked the other way. We can't doubt it, for human nature is the same on either side of the fence. But there is no need of any discrimination either way and in the end no good in it.

OFF TO CHILE

THE use of Chilean Nitrate of Soda as a fertilizer began in 1830. That year about 850 tons went to Europe and this country. Now the Chilean mines export about 2,500,000 tons a year and our farmers use more than one-third of it. The Chileans, the government and the producers of nitrate, are celebrating this summer the centenary of their industry. They have invited a group of American scientists to go to Chile to participate in the celebration, to study the industry and to see the agriculture of the country. The party left New York last Saturday, going by way of the Panama Canal and down the west coast of South America. It included several men well known to the readers of this paper: Dr. J. G. Lipman, Director of the New Jersey Experiment Station; Prof. J. W. White, Soil Technologist of the Pennsylvania Experiment Station; Prof. J. E. Metzger, Agronomist of the Maryland Experiment Station, and Prof. R. M. Salter, Agronomist of the Ohio Experiment Station.

In addition to the scientists one plain citizen goes, the editor of this paper, but his interest in research is so well known that his presence in this distinguished body should create no surprise. Our readers are likely to see the scientific observations of Dr. Lipman, who is a member of our staff, and some other

kind of observations by the aforesaid editor. Since all hands have been notified to take along full dress we hope that the movie men get a good picture of them, clad in swallow-tails, tall hats and white gloves, just after they have scaled the Andean heights of Chilean hospitality.

DRY-WEATHER CATTLE

LOWER prices for fat stock have hit all growers, feeders and graziers a hard lick. In some regions, notably in West Virginia in our territory, a spring drouth of unusual length has cut short pastures and meadows, making it necessary to ship out stock regardless of condition or of price. The cattle finished on grass in this territory this year cannot make the usual gains. The lambs will be later and lighter than in years of abundant grass. More of both must be sold, for the supply of winter feed is inadequate. Emergency feed crops will be grown where that is possible, but the conditions which make such crops necessary also make it hard to prepare for them. Dry-weather cattle and sheep seldom come to market in June, but they have come this year. Plenty of problems confront stockmen everywhere, but those in dry areas face the toughest ones.

OUT OF THE PAST

WE don't pretend to be a bearded prophet, but several years ago in discussing the possibility of stabilizing markets by an official agency we ventured to remark: "The operations of a corporation which is buying to prevent a low price or selling to prevent a high price, not acting for commercial reasons or according to them, are more likely to cause instability than to create stability in markets. An accumulation of commodities in the hands of such a corporation, not governed by commercial motives, may easily become a disturbing factor because nobody can foretell what it may do or when it will do it. Such a board's policy in buying must be to create an artificial market situation and in selling to maintain the same thing, all of which is more conducive to instability than to stability." Isn't it working out that way?

NO DOLLAR MARK

ON Tuesday, June 24, the dollar mark disappeared from the list of wheat quotations. Up to that day it had survived in the price of distant futures. The decline which eliminated the dollar mark was not accompanied by heavy selling or by any sort of wild speculation. There is no chance to blame speculation for the low price of wheat this time, for the volume of trading has been less than what is called normal at such a period.

If anybody wants an expression as to the merits of the plan under and by which the Federal Farm Board attempted to stabilize the price let him look at current market quotations. If anybody wants information about the wisdom of the Board let him consult the quotations, remembering when the Board declared the price to be too low and offered to lend \$1.25 per bushel of the public's money on No. 1 Northern. And if anybody wants to know the ultimate truth about all such movements to control, regulate or stabilize prices let him keep his eye on wheat and cotton and all that pertains to trade therein. Those who want to learn are or will be in position to do so, not by anybody's opinion but by the country's business experience. We venture to predict that before very long a demand will arise for the elimination of the stabilization feature of the Agricultural Marketing Act, and that ultimately this will come to pass. For experience is going to teach what counsel has failed to teach, a costly but valuable lesson in economics.

New Jersey Farm Comment

By G. W. HARRIS

WHAT is the potato situation in New Jersey? Discussion of cultural methods, crop prospects and demonstrations of power potato machinery last Tuesday drew over 200 growers to the annual potato field day held at the farms of Jesse Coleman and Robert Dilatash, Jr., near Lawrence Station, Mercer county.

Although potato growth in New Jersey looks unusually good this season, many fields have an uneven stand. Dr. Wm. H. Martin, New Jersey's well-known potato expert and leader, blamed this situation on planting conditions. Too deep planting of seed pieces has caused serious losses from rhizoctonia in this section. Several growers stated that never before had they experienced a planting season with soil in a more friable condition and because of this, most potatoes were planted deeper than usual. Shallow planting in New Jersey's early potato soil is contrary to Dr. Nixon's deep planting advice to Pennsylvania late potato growers, but tests made in New Jersey have shown decided increases in disease with deeper planting.

Dr. Martin, warning the growers of the leaf hoppers which are rapidly making their appearance in potato fields, urged them to continue to spray regularly and thoroughly. In answer to a question about necessary spray pressure, he stated that under New Jersey conditions 250 pounds spray pressure would do a thorough spray job.

In checking over 24 Monmouth county fields containing between 1200 to 1400 acres of potatoes County Agent Douglass reported less than 3 to 5 per cent disease. This speaks well for Central Jersey growers and is the result of using better seed and better cultural methods. Ten years ago serious heavy losses resulting from disease was common and spraying was merely a topic of debate.

Both County Agents Bowen and Douglass upheld Dr. Martin's opinion that deep planting was a leading cause of New Jersey's uneven potato stand.

W. W. Oley, of the Bureau of Markets, announced that beginning on July 14 the Hightstown market reporting office would open to give market information during the entire harvest season.

This will be the third season that the Hightstown office has been in operation. From here Central Jersey growers receive daily information about shipments and prices and conditions coming from competing areas. Such information has a tendency to stabilize the marketing program of this great potato producing section.

The Bureau of Markets has also arranged with station WOR to broadcast market conditions and prices of potatoes twice a week during the digging season. The hour which this will be on the air has not yet been established, but it is thought that growers will tune in on WOR at noon-time for this information.

At the Dilatash farm several types of tractor-cultivators loudly proclaimed the passing of the horse as they sped up the long potato rows leaving behind mellowed and moist surface soil. In a field of shoulder-high rye other tractors with plows could be heard as they quickly buried the ripening crop.

Mr. Dilatash brought out his truck-mounted sprayer and demonstrated his method of spraying 30 to 40 acres of potatoes in a day. A unique feature of this sprayer was an arrangement for lowering and raising the spray boom with a lever from the driver's seat.

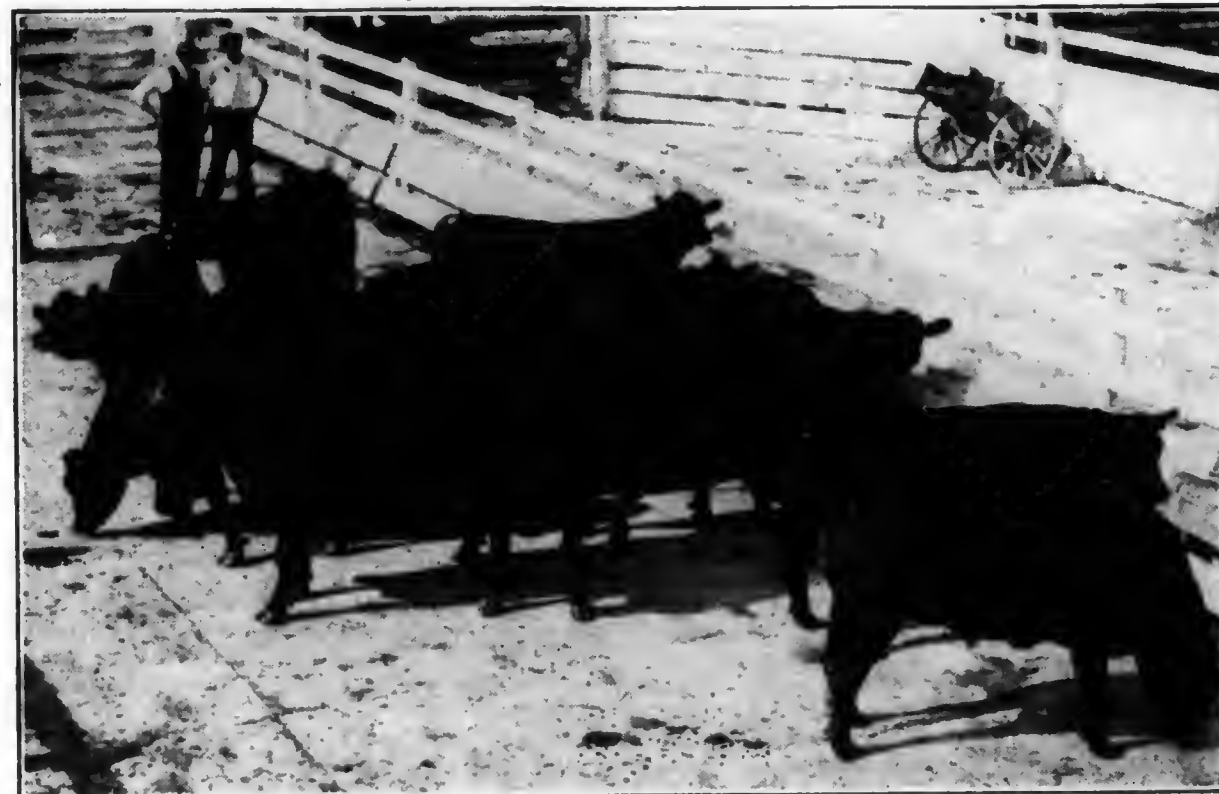
Power farming is rapidly finding a place on New Jersey potato farms and as more and more growers have adopted power methods the increasing interest in such demonstrations and discussions have been outstanding.

MRS. OTTILIA M. KAHANT has been named as the first home demonstration agent for Union county. Mrs. Kahant, a graduate of Columbia University, started her new duties on July 1.

THE first three days of selling over the Beverly Auction Market block last week returned to Burlington county fruit and vegetable growers more

for most of their produce than consigned shipments to New York. These prices obtained through 15 or more buyers at the auction point toward success in this new enterprise. Shipments offered for sale on any one day did not meet the volume demand of the buyers—a serious handicap to the market which, under existing production and marketing conditions in the county, the growers could and should remedy.

The market, which is operated by the Beverly Cooperative Growers' Association, offers producers an opportunity to sell by auction or, if the price offered is not satisfactory, to consign through the Association direct to New York. Growers might profitably pack their fruits and vegetables according to demands of the New York market and support their own auction market—then if low prices warranted withdrawal from the auction they could consign to New York as they have in the past.



The Champion Carlot at the recent Lancaster Fat Cattle Show. These 14 Angus steers averaged 1,185 pounds and sold for \$20 per cwt.

Comparative prices received at the Beverly Auction Market and in New York for the first three days may be of interest to other sections where auction markets are under consideration.

Beverly Auction Market	gross		net	New York	
	\$1.27	\$1.20 1/2		\$1.34	\$1.03
Green flat beans	1.27	1.20 1/2	1.21	.91	
Green round beans	1.92	1.54	1.88 1/2	1.52	
Wax beans	1.10 1/2	1.05	1.13 1/2	.92	
Cherries (12 qt.)	4.10	3.80	4.10	3.45	

A commission of five per cent is charged by the auction for selling, while a ten per cent commission is charged in consigning to New York. Besides the sales commission of consigned produce the following hauling costs are deducted from the gross returns: bushel hamper, 18 cents; 12-quart climax basket, ten cents; 32-quart crate 25 cents.

Meet the Indian on the Nickel

CHIEF TWO GUNS WHITE CALF is one of the Blackfeet Indians who will welcome and entertain members of the Pennsylvania Farmer Pacific Northwest Tour on their visit to Glacier National Park. He is the Big Chief whose features adorn the "heads" side of the buffalo nickel.

Through the courtesy of the Great Northern Railway we are presenting a beautiful portrait of this famous Indian chief, as long as the supply lasts, to those who make reservations for the tour. The portraits are about eight by ten inches, and are mounted on a beautiful paneled mat, ready for hanging or framing. Each is autographed in Indian sign language by Chief Two Guns White Calf.

ing economic data required by the Board in shaping its program and policies.

A ONE-YEAR study of New Jersey's farm cooperatives began this week with the appointment of Byron C. Denny as field agent for the Federal Farm Board. The Board is making a careful study of farm cooperatives in the eastern states in an effort to learn how they may fit into the farm relief program.

COUNTY AGENT THOMPSON of Burlington county says that pastures are like the poor, in that they are always with us, and for that reason receive little attention. Two years of pasture fertilization in that county have demonstrated some striking results.

Frank Atkinson at Columbus fertilized and limed a part of his pasture two years ago. Today the change in type of growth to white clover is very noticeable. An even more striking change in type of pasture growth may be seen on the farm operated by George Dubell on the South Pemberton Road. Here clover and bluegrass have increased materially and growth itself has increased.

Too often dairymen turn their poorest land into pasture and never give the improving of this grazing land consideration. It has been demonstrated many times that pastures can economically be made productive by a systematic program of fertilization.

HUNTERDON county egg producers who have been considering for several months the possibility of establishing an auction egg market in that county have decided to organize. The market will start as soon as enough poultrymen guarantee to support the auction with the necessary volume of eggs.

MRS. DONALD S. KELLER, the former Alice B. Clifford who for the past five years has been home demonstration agent in Sussex county, has resigned her position in the county, the resignation to be effective July 31. Mrs. Keller will be missed by her many friends and co-workers in the county and other parts of the state.

Miss Verna P. Evans will succeed Mrs. Keller as home demonstration agent in Sussex county. She is a graduate of Texas University and has studied home economics in the University of California and Columbia University. For three years she was a member of the extension staff of the Texas Agricultural and Mechanical College.

HAROLD ROBERTSON, a graduate of Massachusetts Agricultural College, has been appointed assistant horticulturist in pomology of the New Jersey Extension staff. He began his new work on Monday and will soon become known to New Jersey fruit growers.

THE thirty-eighth week of the Hunterdon County Egg-Laying Contest found New Jersey flocks of White Leghorns again monopolizing the honor roll of high scorers.

Leghorns from the Fox and Son Poultry Farm, Little Falls, and the Rhode Island Reds from Kerr Chickeries, Frenchtown, continue their individual dispute for first place honors in total production. The Fox and Son birds with a 1,854-egg score hold a 96-egg advantage over the Reds.

Six other flocks from New Jersey, all White Leghorns, are listed among the first ten pens in total production. They include the entries of Joseph Joachim, Riverton, 1,754 eggs; Jerseyland Farm, Point Pleasant, 1,733 eggs; George A. Pierce, Whitehouse, 1,729; Joseph Joachim, 1,718; an dtwo entries from Feinderf Farm, Flemington, with 1,655 and 1,647 eggs.



A secondary farm-to-market road in Maryland before and after Kent county decided on practical farm relief.

Kent County Gets Out of the Mud

By G. W. HARRIS

FARMERS of Kent county, Maryland, pulled themselves out of the mud this past year by improving over 100 miles of their county roads. By financing these roads through the county's yearly income they completed a twenty-year road building program in one year. Construction of 51 miles of single track concrete highway and 50 miles of slag road from farm to market is the result.

Kent, an agricultural county with deep, rich soil of sassafras loam, has taken a long stride toward eliminating its greatest rural handicap—impassable mud roads. Although rich in fertility and ideal for farming, this soft loamy soil made dirt roadbeds impossible to maintain. Immediately following heavy rains and during the fall and spring these highways were hub deep with mud. Doctors could not reach the sick, children were kept from school, farm marketing was at a standstill.

These people are no longer buried in the mud several months in the year. They have obtained relief from mud and dust—especially those with farms and orchards along Kent county's 209 miles of beautiful water front property, where under the former road program there was little hope for relief. Markets, churches and schools are now at their doorstep. Sickness no longer strikes terror, for physicians can respond to urgent calls.

The passage of two bond issues totaling one million dollars made it possible to bring all the farms in this rural community an average of four miles nearer a hard surface road. Nine hundred thousand dollars were spent in the construction of 51 miles of nine-foot concrete road, and \$100,000 for 50 miles of less traveled slag road.

By 1927 through traffic and the more important county towns were well provided for by 70 miles of macadam and concrete highway. Sixty-eight miles of secondary dirt roads and 80 miles of tertiary roads in the county were yet to be improved before the farmers would be released from their mud imprisonment.

Gasoline Tax Pays Off Road Bonds

During that year the new four-cent gasoline tax went into effect in Maryland. From this fund the state allotted to Kent county 2.57 miles of 16-foot concrete road each year. At this rate it would be a twenty-year program to complete these secondary highways. Many farmers would never enjoy good roads, yet for years they must pay for improvements which only their children would enjoy. The prospect of twenty years of waiting for hard surface roads was discouraging. It occurred to some public-spirited citizens that the mileage of improved roads could be nearly doubled by reducing the less traveled secondary highways to single track instead of the usual double track width. Two such highways constructed by the State Roads Commission in 1927 proved so satisfactory that a million-dollar road program evolved and was given careful consideration.

But a million dollars in bond issues? Immediately an increased tax burden loomed before you, but Kent county found an answer to this. Loans were made on the credit of the county. The county was bonded for \$900,000 for concrete roads, the issue to be paid off in ten years. The principal of this will be paid by the state from funds allotted to

Kent county from the gasoline tax and lateral road fund, and the interest is to be carried by the county. In 1929 Kent county's proportion of the gasoline tax was \$50,000 and was used as the first payment on the \$900,000 loan.

Upon completion of the 51 miles of nine-foot road it was taken over by the State Roads Commission and the county was relieved of the cost of maintaining its most expensive dirt roads. This item alone will more than carry the interest charges on the bonds if used for that purpose. As the maintenance funds for dirt roads were not reduced by the County Commissioners when the state took over the 51 miles of improved roads, the remaining unimproved roads in the county can now be kept in much better condition.

The second bond issue of \$100,000 was used to build 50 miles of slag road on the tertiary system. Both the principal and interest of this loan is being carried by the county and it is to be paid off in twenty years. In 1929 the county tax rate was \$1.54 and the increased rate by years for the financing of this \$100,000 bond issue will be as follows:

1929	21	1939	21
1930	21 1/2	1940	21 1/2
1931	22	1941	22
1932	22 1/2	1942	22 1/2
1933	23	1943	23
1934	23 1/2	1944	23 1/2
1935	24	1945	24
1936	24 1/2	1946	24 1/2
1937	25	1947	25
1938	25 1/2	1948	25 1/2

This million-dollar road building program meant an average increase of \$3.60 in taxes for Kent county property owners, but in return they now have an opportunity for better markets, better schools and a higher standard of rural living. The 100-mile road system is for farm-to-market travel and does not include through highways nor prospective through highways.

Two mass meetings were held by the Kent County Chamber of Commerce in the spring of 1929, the proposed road program was discussed and with the support and untiring effort of the local papers, the county Chamber of Commerce, the county members of the legislature, the county commissioners, the farm bureau and many other staunch good-road boosters, it was decided to present the proposition to the voters. Two bills which made it possible to present these bond issues to county voters were prepared, passed by the Legislature and approved by Governor Ritchie.

By these bills the county was authorized to give its credit as a guaranty for payment of the bonds. The State Roads Commission had agreed to the plan of liquidating the bonds for concrete roads by use of the county's allotment of the state gasoline tax, and offered to construct and maintain the concrete roads as a part of the state system. The slag roads were to be built and maintained by the county.

The Citizens' Committee of seven drew up plans and cooperated with the State Roads Commission and the County Commissioners. The people of Kent county voted in favor of this million-dollar road program on May 11th, 1929. Ten days later surveys were started and this rural community had

its first clear vision of "farm relief." On May 26, 1930, at Chestertown, Kent county, celebrated the completion of its farm-to-market roads.

Governor Albert C. Ritchie, in addressing the visitors, said, "This is an historic occasion in that Kent county is a pioneer in pointing the way toward a solution of our county road problem in our state."

Other counties in Maryland have responded to Kent county's example. They consider this a sound plan for financing county roads and are taking steps to lift their rural communities out of the mud.

Can Other Counties Do Likewise?

Does Kent county's program suggest a plan for county and township road relief in other states? In the first place we must keep in mind that each year the state of Maryland allots a certain percentage of the gasoline tax to each county for construction of hard surface county roads. This does not go into the county treasury to become lost among general funds, but is designated for road construction under the direction of the State Road Commission. This is the first fundamental of Maryland's sound county road building plan.

Until Pennsylvania and New Jersey adopt a more satisfactory system of gasoline tax distribution than is in force at present there would seem to be little hope for the same relief to farm dwellers on county and township dirt roads as carried out by Kent county.

When you have returned home mud-stained and weary after plowing through miles of muddy roads with your automobile or truck, or when only a horse and wagon can get to market, then is the time to sit down and think through rural road problems. How much money is being spent in your county or township for the upkeep of dirt roads? What funds from the gasoline tax are available to your county? What other funds may be available for such road construction? Can you capitalize this yearly income as Kent county did? Will the State Highway Commission cooperate in supervising such a program?

It is the mud dwellers who must solve the problem. Only through their action can good farm-to-market roads be built.

Drouth Hit Eastern Shore Potatoes

THAT intensive early potato growing section, the Eastern Shore of Virginia, was the assembling place recently for potato growers and specialists from South Dakota, Canada, Florida, Maine, Colorado, Prince Edward Island, Nova Scotia and many of the nearby states. They met to view the Shore's new crop.

Digging is under way in Northampton county and soon the rumble of train loads of these potatoes will be heard on their way northward. It is reported that in this section the early drouth has cut the harvest to 16,000 carloads instead of the 20,000 expected under normal conditions.

The Eastern Shore of Virginia Produce Exchange reports that the crop is from a week to ten days behind the normal season. New Jersey and Long Island are both earlier than usual, but if necessary can probably hold their crop until the first of August.

Milly Woodbridge's Trek to the Pacific

The Pioneers of the Peace River Valley

By C. A. Stephens

Copyright, 1930, by Capper-Harrison-Steele, Inc.

FOR sometime longer, while they waited for spring, it was Pinky's business to drive the heifer up to the brule and watch over her for an hour, night and morning, while she fed. By this time Pinky had largely overcome her fear of horned cattle; and Brighteyes did not need much driving; the moment the bars of her shed were let down, she was wont to set off on a run, take a drink at the pool and then start for the brule as fast as her slim but nimble legs would carry her. Mike usually followed after them, but apparently from a sense of duty. For Mike hated an Indian. Pinky never had been able to really make friends with him; the choicest tid-bits from her hand were accepted with an air of deep suspicion. But Milly was Mike's idol. Every morning he would come, tail wagging joyously, and put out his right paw to shake hands with her. Whenever she went out, Mike was close behind, or circling about her. But Pinky he only accompanied with disdainful reluctance. He would never shake hands with her; and once when Pinky tried to do so by force, he growled and snapped at her.

They did not trust the Jersey to go to the brule alone. Bears were now emerging from their winter dens. Several had been seen of late. Up at the brule Pinky saw a large gray one come out of the timber at a distance and stand looking wistfully at the heifer. Winthrop was off fishing through holes cut in the ice of the lake at the time; but Pinky's shrieks brought out Milly with the gun. Mike had gone barking to confront the bear. They called him back and hastily drove the Jersey down to her shed. This grizzly had shown no disposition to attack the cow; but many other prowlers were now making their appearance about the lake, and two nights later Brighteyes' trips to the brule ended tragically.

Under Milly's daily instruction Pinky-Blue had come to be quite useful and did many things fairly well, but she was never wholly reliable; an eye had to be kept to what she did; and what she did passably well one day, she might do very badly the next.

That night—the night our narrative resumes Pinky had driven the Jersey down from the brule and put her in the shed earlier than usual. Milly who was busy cooking their evening meal, felt pretty sure that the squaw had not allowed her to browse for an hour. Pinky's ideas of time were always hazy; half an hour was much the same as a whole hour with her.

In the matter of putting up the bars, too, which confined Brighteyes to her shed, Pinky was quite apt to be remiss, merely touching the ends of them in their sockets, instead of thrusting them tight. Milly or Winthrop were accustomed to attend to this every evening. But that night Winthrop was off fishing again, at the mouth of a little stream that entered the lake at some distance away, and did not return to look his catch till dark; Milly and he both forgot to look to the bars. Along in the small hours of the night, when the occupants of the house were soundly sleeping, Brighteyes waxed uneasy. Perhaps she was hungry; perhaps it was the moonlight, since there was a late-rising moon that night. She rubbed the bars down, walked out and after going to the pool for a drink, took her way up to the brule to have a midnight luncheon off such as the place afforded.

OTHER rovers, less bucolic, were also out in quest of lunch. Scout wolves espied the Jersey and gathered ten or twelve of their followers, first approached stealthily in a circle, then made a ferocious rush upon her. Brighteyes was nearly as fleet as a deer. She fled for home, the wolves in close pursuit, not howling but in deadly quiet, bent on outstripping and throwing her. Down from the brule they came at break-neck speed, dashed across the pool and rushed past the cabin. If Brighteyes had known enough to take refuge in her shed, her fate might have been different. But she careered past it and past the cabin and then on across the flats by the lake, the wolves now all about her. One had laid hold of her tail, and ere long another, out-running her, came alongside and seizing her by the nose, threw her on the frozen snow. Thereupon the whole pack pounced upon her, throttled her from all sides and were soon tearing the flesh from her bones.

Meantime the rush past the cabin with sounds of suppressed snarling had waked Milly. In a moment she was up and at the door. The night had turned misty, and clouds had obscured the moon. Indistinctly she saw the rout disappearing down the flats and immediately heard a distressed howling. "Wint!" she exclaimed. "Something has at-

tacked Brighteyes! Get up, quick! It's wolves, I'm afraid!" No one can wake from sound sleep, grasp a bad situation and arm himself instantly. It was several moments before Winthrop got out his gun, followed by Milly with an ax.

Wolves and heifer were three or four hundred yards down the flats by this time, and the end of the chase had come. What they heard now was a horrible snarling about a dark, recumbent object on the thin, frozen snow. Winthrop ran up within twenty paces and fired first one barrel and then the other into the mob of leaping, struggling gray bodies. A yell was heard, and three or four of the wolves ran off a little way, but turned, the green glint of their eyes showing in the obscurity. They had already tasted blood. All were growling savagely. The shots hardly attracted the attention of the others. Winthrop had not stopped to take extra cartridges. He dared not approach the ravenous, maddened brutes with the ax, single-handed. Milly, too, was begging him to come away. "It's of no use now!" she cried. "Oh, my poor little Brighteyes! The last living thing that was left us from home!"

Winthrop ran back to the cabin for cartridges, having secured them he fired several shots from a distance and put the pack to flight. At least the wolves slunk away out of sight, though they could still be heard moving about at a distance till day-break.

Next forenoon, with Pinky's help, they buried the torn and mutilated body of the Jersey in a pit at the foot of the craggy hills back of their cabin, and protected the place with a pile of flat stones. Brighteyes had been with them so long they had grown very fond of her. All the vicissitudes of their long journey through the wilderness had been daily enlivened by her impulsive little ways, freaks and moods. Far greater griefs had beset them there, yet Milly shed some bitter tears over that forlorn grave at the foot of the crags.

They also mourned Brighteyes in more material ways. Her milk and cream had contributed by



The Cheerful Plowman

A MILLION DOLLARS!

HAD I a million dollars what would I do? Let's see! I'd clothe those kids of Mahler's and aid old Frank McGee; I'd buy the Widow Duffy a second Guernsey cow and get Old Man McGuffey a better walking plow; I'd give the church ten dollars and give the preacher ten, I'd buy new sox and collars for Siwash Sifer's men; I'd pay up Gifford's taxes, I'd patch Nig Woodard's shed, I'd get new saws and axes for old Wood-cutting Ned!

I'd buy—but wait a second! Would those gifts be the stuff? Perhaps I haven't reckoned far enough! Perhaps I am too frisky in planning what I'd do, those gifts might all be risky, they might be foolish, too! Suppose I clothed those kiddies of Mahler's spic and span with blouses and with middies in colors pink and tan—would not that wretched father, that lazy dad, say, "Wow! I guess I need not bother to lift a finger now!"?

Suppose I helped with money old spavined Frank McGee, would he not say, "It's funny that guy is helping me, but since he is I figure I'll sit around and read, quit working like a nigger. It's leisure that I need!"? Would not the Widow Duffy, and Gifford, let us say, that poor old Man McGuffey, and others by the way, all get too blessed lazy if I should pay their bills, would they not soon go crazy from loafing on the hills?

Would not the church and preacher both lose their zeal and pep like every other creature that's pampered step by step? On second thought I reckon I'd better not be rash when foolish fables beckon for my imagined cash; it never aids the living to baby them, by jink; this ill-considered giving, I think, is not the thing!

J. E. T.

far the most healthful portion of their food during the entire summer, fall and winter. To it Milly attributed much of the uniform good health she and her brother had enjoyed ever since leaving the Peace River valley. A diet of fish, game and berries would have grown wholly unpalatable, and perhaps unwholesome, without the Jersey milk which had all along relieved its tedium. The loss of Brighteyes also deprived them not only of sustenance, but of their principal burden-bearer.

"I don't see how we are going to get on from here", Winthrop said despondently. "If we try to carry our outfit we would be loaded down like that squaw we met who was totting her old man on her back!" Milly, too, was pondering the same problem. "Couldn't we go by water instead of walking?" she questioned. "The outlet of this lake flows into the Skeena River which goes to Prince Rupert."

"B" "T we have no boat," Winthrop objected. "We could make a canoe," Milly suggested, and Pinky who sat listening, cried, "Makum canoe!"

"Maybe", assented Winthrop, "if we can find a log big enough." He went out presently to inspect the size of the cottonwoods that grew along the river bank. The only large one sound enough for the purpose was about two feet in diameter; and a log for a canoe needs to be three.

But they thought it might answer. Winthrop felled the tree, cut a log fifteen feet in length and set to work to dig out a canoe from it. He worked all day; and Milly and the squaw helped at times. They completed it on the day following. But when launched in the pool, it proved to roll so easily that they dared not put off in it, and finally gave up the idea of a canoe for that of a raft, like those they had made for crossing the Finlay and the Omineca.

The main body of ice had not yet melted on the lake, but the days had now grown much warmer; they knew that the outlet was clear, and decided it would be better to build their raft there than wait for the lake to open, which might not be for two weeks more. Accordingly they packed their outfit down to the outlet, eight miles along shore. They had to make two trips for it and found the day a wearisome one.

It was not without a sense of regret that they bade adieu to the little cabin which had sheltered them so long and comfortably, and then went up to the lonely grave by the waterfall for a last farewell to him they were leaving behind forever. Brother and sister stood there for a time, hand in hand, their tears flowing freely, then drew slowly away in silent, ineffable grief.

As was learned afterwards, it was at about this same sad time that Quinby Masterman, accompanied by his younger brother Welcome and three Haida Indians, came up the Skeena River in a motor boat, looking for them, and had actually penetrated to within ten miles of their winter camp—before becoming discouraged and giving up the quest.

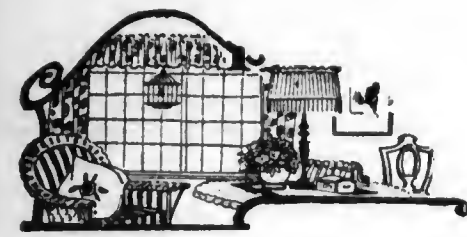
Later on an erroneous rumor that an emigrant party from the East had wintered at the westerly end of Lake Des Francois, led the searchers to make a trip there of a hundred and fifty miles by dog team—only to be again disappointed.

In short, the conclusion to which the Mastermans came at last was that either the Woodbridge family had grown disheartened and turned back, or had perished obscurely from cold and privation during the winter.

Those two brave young voyagers were still pressing on, however, but their camp at the outlet of Lake Babine was the most wretched one of the entire journey. They now had no tent, and only such shelter from the sharp night air as two blankets sewn together would afford, those and Pinky's furs. For food, too, after a hard day, they had nothing save fish, tea and a handful of dried berries. Surely they missed their little cabin and the accustomed long draughts of rich, new milk. Even Mike looked glum. Pinky, however, bore these privations far better than Milly and Winthrop. There had been much harder spots in Pinky's life!

On the hills above the outlet stood numerous dry pine stubs—sere, gray mementoes of former forest fires. To these Winthrop had resorted early next morning for logs to lay a raft. One by one he felled them; Milly and the squaw drew the logs down to the stream bank; and, later in the day, using iron spikes saved from former rafts, they constructed a new one which, I think they told me, was fifteen feet in length by six and a half in width.

(To be continued.)



The Farm Home



Oven Processing

By DORIS W. McCRAY

THE oven of a kerosene stove may be used, instead of the usual wash boiler. It is a good plan to place an oven thermometer on the oven rack, unless your oven door has a dependable heat indicator. One should give it rather close attention, as a temperature of 325 degrees Fahrenheit might soften jar rubbers and cause boiling over of food. Also a temperature below 250 F. would not be dependable for sterilizing contents of the jars. Try to keep the temperature between 250 F. and 275 F. at all times, by turning the flame very low.

The jars are prepared as for any canner, selecting fresh, firm, not over-ripe products, grading according to size and ripeness, cleaning thoroughly and cutting as for table use. Fruits may be cold packed and half-sealed, but vegetables should be packed into the jars while boiling hard in the kettle, and they are sealed tight before placing in oven.

Time is counted from the placing of food into the oven, but the oven should be pre-heated. There would be no objection to placing fruits in cold oven, but vegetables should be put into hot oven—or rather I should say warm oven, as this is a very slow oven, the kind used for baking of beans. The newer better oil stoves will maintain a steady flame, without blowing out, if protected from draughts, even when turned very low.

It is convenient to place the jars in an uncovered roaster, flat pan or baking sheet, as they can all be removed at once, however, I think the heat circulation is better and possibly processing more thorough if jars are placed directly upon the oven racks, leaving an inch or two space between the jars, and between jars and sides of the oven.

If jars of vegetables are tightly sealed, the food not being crowded too tight, and if an inch of empty space is left at the top of jars of fruit which are left half sealed, there will be no difficulty in boiling over of food, so long as oven temperature is right. Observing these precautions, I never use a cooky sheet or dripping pan below the jars to catch boiled-over food and protect bottom of oven.

Processing Time

Pints of apricots, berries, cherries, currants, grapes, peaches, plums and rhubarb are processed 45 minutes; quarts 65 minutes. Temperature of 250 F. for all oven canning. This may run up to 275 with no harm. The point is to get food in jars boiling as quickly as possible, then keep it boiling long enough for sterilization, but not let it scorch or boil over.

Pints of apples, pears and tomatoes are processed 50 minutes, quarts 75 minutes. Pineapple pints 60 minutes, quarts 90 minutes.

Pints of carrots 150 minutes, quarts 180 minutes. Pints of pumpkin or squash 180 minutes, quarts 210 minutes. Pints of greens, peas and peppers 240 minutes, quarts 270 minutes. All other vegetables, pints 210 minutes, quarts 240 minutes.

The jars are lifted out, when finished, with oven mitts or jar tongs, placed upon folded cloth or newspapers. The seal is made tight and the jars are inverted, to make sure the hot liquid in contact with the rubber completes the sterilization and formation of a perfect seal.

Okra Dishes

STEWED OKRA. Cut the ends off the pods of young okra, boil for one hour in salted water, then drain and reheat in a saucepan with some melted butter.

The okra can be used as a garnish to boiled rice. Canned okra needs only to be boiled five minutes, drained, seasoned and tossed about in hot butter in a frying pan for two or three minutes before serving.

Okra and Grilled Tomatoes.—Cut good firm to-

matoes in half, season well and broil, then serve with a garnish of stewed okra.

Stewed Okra with Tomato Sauce.—If fresh okra is used prepare as in stewed okra recipe, and if canned okra is used drain and heat in boiling salted water. Put one tablespoon of butter in a frying pan, and when melted lift the okra from the boiling water and place it in the frying pan; season well with salt and pepper and then cover with one cup of tomato sauce, and, when thoroughly heated through, serve.

Okra and Tomato Escallop.—Arrange alternate layers of sliced canned okra and tomato in a well buttered baking dish, separating them with layers of boiled rice well seasoned with salt and pepper and dotted with butter. Cover the top with fine crumbs and cook for fifteen minutes, or until browned, in the oven.

Useful

A LIGHT, airy closet prolongs the life of clothes by keeping them clean, in good shape, and by making the necessity for pressing less frequent.

A modern closet should be well lighted and well ventilated. It should contain rods and plenty of hangers, shelves, and racks for shoes, so that nothing need be kept on the floor.

Rods for hanging garments should be at about shoulder height of the person who uses them, both for convenience and to prevent the clothes from trailing on the floor. Special provision should be made for children; or better still, special closets, with rods and hangers adapted to their needs.

Narrow shelves, metal racks, or shoe bags on the inside of the closet door are suitable for shoes.

What Shall We Eat?

EVERY question under the sun has been asked and answered regarding the Pennsylvania Farmer Pacific Northwest Tour except this important one. We knew the women, at least, would be interested in the menu printed below. This, of course, is only a sample of the many good things served in the dining-cars and hotels. With menus like this, watching diets and counting calories will be a lost art after sixteen days.

Breakfast		
Cantaloupe	Berries and Cream	
Food Sheet Oranges	Preserved Figs	
Oranget	Fresh Plums in Syrup	
	Shredded Wheat	
	Boiled Salt Mackerel	
Smoked Ham	Steamed Potato	Breakfast Bacon
Omelet, Espanole	Eggs to Order	
	Omelet with Marmalade	
Griddle Cakes	Potatoes Au Gratin	French Toast
Maple Syrup	Wheat and Bran Muffins	Wine Jelly
Coffee	Tea	Cocoa
		Milk

Luncheon		
Young Onions	Radishes	
Cold Consomme	Rice Tomato	
En Cup	En Tureen	
Boiled Smoked Ham with Spinach		
Tenderloin Steak with Fresh Mushrooms		
French Fried Potatoes		
Broast of Chicken	Assorted Cold Meats	
Wine Jelly	Potato Salad	
Sugar Corn	Pickled Beets	
Au Gratin	Spiced	
	Tomato Surprise	
	Mayonnaise	
Watermelon	Ice Cream and Cake	Cherry Pie
	Macaroons	
Coffee	Tea	Food Tea
		Milk

Dinner		
Olives	Radishes	
	Fruit Juice Frappe	
	Orange Pineapple, Grape	
	Puree of Green Corn	
	Pacific Salmon—Au Gratin	
	Cucumbers	
Green Peppers Stuffed with Sweetbreads		
Roast Prime Ribs of Beef		
Natural		
Hot Tea Biscuits		
Steamed Potatoes	Head Lettuce	Cauliflower
	French Dressing	
Peach Shortcake	Raspberry Sundae	
Whipped Cream	Macaroons	
Bequetor Cheese and Crackers		
Coffee	Tea	Milk

Meals for Threshers

By CORVIA A. CHRISTIAN

NOT long ago I served a thresher dinner to seven hungry men, and the thought struck me how easy and simple it was as compared with those of twenty or twenty-five years ago.

I prepared the entire meal easily alone, including the baking, in a forenoon, besides doing the other general housework. This is what I had: Mashed potatoes, home-baked bread and butter (both white and graham), home-canned tenderloin with brown gravy, baked beans, escalloped corn, cabbage salad, sliced tomatoes, pickles and preserves, creamy rice pudding, pumpkin pie, tea, coffee, cream and sugar.

I was impressed with the fact that everything was produced on the farm excepting the tea, coffee, sugar, spices, rice, flour and butter. The previous day I had wondered if I should order a few knick-knacks or prepared foods from town, but decided that strict economy and good sense argued against it. But I tried to have everything well cooked and served appetizingly, and the men ate with zest and seemed satisfied with this plain but hearty meal.

As I quickly washed the dinner dishes my mind went back to the early days of my housekeeping when those threshing and silo filling meals were such bug-bears. Well do I remember the army of men we had to feed (so many they were in each other's way). And after washing dishes most of the afternoon we had to put on another heavy meal for supper and then wash dishes well into the night. For it was late when supper was finished, and frequently we women had to help with the chores before we could do the supper dishes. Then after fixing up a bed or two for the hands "who decided to stay over," we dragged our weary bodies to bed for a few hours of rest only to dream of the horrors of another day.

Cooks Don't Mourn the Old Order

And fearful and wonderful were those meals! The tables groaned with huge quantities of meats, vegetables, canned goods, breads, cheese, pickles, preserves and pies, cakes, puddings, cookies and doughnuts galore. As I recall how those men gorged themselves with such conglomerations of food I wonder that they were able to work at all.

While we mourn some things that passed with "the good old days," threshing and silo filling meals are not among them.

With the shortage of help, improved methods and machinery, the number of men required to thresh and fill silo has been reduced to a minimum. On some farms this is handled by changing with neighbors, and some farmers fill their silos alone with the help of a son or two or perhaps a hired man or day helper. For three years my husband has filled silo alone excepting what random help he could pick up by the day, and he likes this method better than the old. True, it takes longer, but there is no wearisome paying back neighbors or high-priced men to pay. And he gets a nice lot of corn in the silo, besides what a saving of food and labor for me. Almost everywhere, I think, there are fewer men employed, they go home for supper, and the meals are simpler and more wholesome.

Delicious Cake Filling

THREE cups banana pulp, six and one-half cups sugar, juice of one lemon, one-fourth teaspoon butter, one bottle pectin.

Use only mellow ripe bananas. Crush to a fine pulp. Put crushed fruit into large kettle, and add sugar, butter, and lemon juice. Mix and bring to a boil, stirring constantly. At once add pectin, stirring constantly, and bring again to a full rolling boil. Boil one minute, stirring constantly over entire bottom before and while boiling to prevent sticking. Remove from fire, and stir frequently for eight minutes to cool slightly, to prevent floating fruit. Pour quickly. Cover hot butter with film of hot paraffin; when butter is cold, cover with one-eighth inch of hot paraffin. Roll glass to spread paraffin on sides. Sometimes sets very slowly. Requires eight to twelve bananas. Makes nine to ten eight-ounce glasses.

The small screwtop jars which mayonnaise comes in make excellent containers for salads, fruit and other picnic foods.

TWO HELPERS INSTEAD OF ONE IN EVERY BAR

That's why

FELS-NAPTHA GIVES YOU SUCH SWEET-SMELLING WASHES

YOU'LL never know how sweetly fresh and fragrant your clothes really can be—until you try Fels-Naptha.

For Fels-Naptha brings you extrahelp to get clothes clean clear through. The extra help of two safe, active cleaners combined in one bar. Plenty of dirt-loosening naptha (smell it!) and good golden soap, the dirt-remover. Working together, they dissolve grease and grime. They loosen every tiny particle of dirt and wash it away—thoroughly. And when your clothes come off the line, they're sure to smell fresh and airy—sweetly clean through and through.

Fels-Naptha's extra help does away with hard rubbing. It saves your clothes. It saves you! And because it works so quickly and keeps your hands in water less time, Fels-Naptha saves your hands, too.

Try it and see! Use Fels-Naptha in

tub or machine. For soaking or boiling. In hot, lukewarm or even cool water. For housecleaning, and for all your soap-and-water tasks—use Fels-Naptha and get extra help! Ask your grocer for a few bars—or the handy 10-bar carton—today!

SPECIAL OFFER—We'll be glad to send every user of Fels-Naptha Soap a Fels-Naptha Chipper. Many women who chip Fels-Naptha into their washing machines, tubs or basins find this chipper handier than a knife. Use it and Fels-Naptha to make fresh, golden soap chips (that contain plenty of naptha!) just as you need them. Send only a two-cent stamp to cover postage, and we'll mail you this chipper without further cost. Write today. Dept. 7-7-5, Fels & Company, Philadelphia, Pa.

THE GOLDEN BAR WITH THE CLEAN NAPTHA ODOR

FELS-NAPTHA

Citricura
SOAP
and OINTMENT
World Famous Skin and Hair Beautifiers

QUICK RELIEF
SPRAINS
JAPANESE OIL

Conservative buyers

THE AMERICAN FARMER is always in the market. So's his wife. The entire family, in fact. Dad for seeds, fertilizers, machinery. Mother for furniture, household supplies. Jack may need a bicycle or rifle. And you know how the modern farm-girl likes to be up to date in everything. A thousand and one needs arise on the average farm.

Farm-fathers, however, are conservative buyers. They don't purchase things haphazardly. They make use of every opportunity to select just what they want. Common sense tells them which product will bring the most for the money they are able to spend.

Conservatism and success usually run parallel. Many of the most successful farmers read advertisements printed in this journal. They have learned that standard goods are more than experiments; that they can be bought with confidence; that no manufacturer could afford to advertise an inferior product consistently.

Advertised merchandise means definite savings. Advertisements tell you what a product will do, where it can be had, and how much it will cost. When you find yourself in need of a pair of boots, an engine, a new stove—anything—pick up your favorite farm-paper and read the "ads." They will tell you what you can get and what you will receive—before you get it.

HOW TO ORDER

Write your name and address clearly. State number and size of each pattern. Price 15c each, two for 25c. Send stamps or coin. Our Fashion Magazine will help in preparing your wardrobe. Copy only 3c. Address Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.



Summer Clothes Must Be Cool

No. 6744.—Ladies' dress. Cut in five sizes: 34, 36, 38, 40 and 42 inches bust measure. A 35-inch size requires 3½ yards of 39-inch material. Without the drapery 3½ yards will be required. For belt and shoulder strap of contrasting material ¼ yard 39 inches wide is required, cut crosswise. Price 15c or two for 25c.

No. 6756.—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. A 10-year size requires 2½ yards of 35-inch material. To trim with lace will require 2½ yards. For low and rash, of ribbon or material 3½ yards 2½ inches wide are required. Price 15c or two for 25c.

No. 6283.—Ladies' smock. Cut in seven sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires 2½ yards of 36-inch material together with ¾ yard of contrasting material. To finish with bias piping or binding as illustrated will require 3½ yards. Price 15c or two for 25c.

No. 6458.—Ladies' dress with slender hips. Cut in eight sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 46-inch size requires 3½ yards of 39-inch material. The width of the dress at the lower edge with plait fulness extended is 1½ yards. Price 15c or two for 25c.

No. 6377.—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. A 10-year size requires 2½ yards of 27-inch material. If made with long sleeves. With short sleeves 3½ yards are required. To face collar, plastron, cuffs and belt with contrasting material will require ¼ yard 27 inches wide. Price 15c or two for 25c.

No. 6515.—Ladies' house dress with slender hips. Cut in nine sizes: 38, 40, 42, 44, 46, 48, 50, 52 and 54 inches bust measure. A 46-inch size requires 3½ yards of 35-inch material. To make collar, revers facings, cuffs, pocket facings and belt of contrasting material will require ½ yard 35 inches wide and cut crosswise. The width of the dress at the lower edge with plait fulness extended is 1½ yards. Price 15c or two for 25c.

No. 6760.—Girls' dress with bloomers. Cut in three sizes: 2, 4 and 6 years. A 4-year size requires 2½ yards of 35-inch material. To make yoke portions and band cuffs or contrasting material requires ¼ yard 35 inches wide, cut crosswise. Price 15c or two for 25c.

No. 6751.—Ladies' undergarment. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2 yards of 39-inch material. To trim with lace banding requires 5½ yards. String girdle and shoulder straps of ribbon requires 3½ yards. Price 15c or two for 25c.

THE YOUNG PEOPLE

A Revolutionary Maid

By Arissa Lumbower, Pennsylvania

(Age 13 years.)

NANCY pinched herself to make sure she was not dreaming. But, no, there were the British soldiers coming down the street and one was knocking at their door. "Oh, if father was only here," she sighed.

Nancy Standish lived in Philadelphia and her father belonged to the Continental Army. Mrs. Standish, Nancy and her brother had been staying at their city house ever since Mr. Standish joined the army.

Just then the living room door opened and Nancy found herself facing two British officers. Then Nancy remembered her manners and she stood and courtesied to the officers.

"My little maid, we would like to see your Mistress," said the first officer.

"Mother is at Mistress Laton's, she was not expecting company," replied Nancy.

"No, I dare say she was not expecting us," answered one of the officers.

The next morning Nancy learned that the officers, Major Livingston and General St. Clair, were going to stay at the Standish's as long as the British stayed in Philadelphia.

Just as she was about to go out walking the parlor door opened and Major Livingston came down the hall. Nancy courtesied and stepped aside to let the Major pass by. The Major left the house and was soon out of sight.

As Nancy walked down the street she noticed a piece of paper lying on the sidewalk. She stopped and picked it up and although she studied it for a long time she could make nothing out of it. It was all dots and dashes.

The Major is Worried

Nancy decided to postpone her walk for some other day. She hurried back to her room to study the paper. She was sure it belonged to Major Livingston for it had his name on the back.

After putting the paper away in a box, she went down stairs and joined her mother in the parlor. About half an hour later Major Livingston presented himself to Mistress Standish and said in a very excited voice.

"Mistress Standish did you find a piece of paper anywhere around here with some dots and dashes and my name on it?"

"No, I have not seen any such paper," replied Mrs. Standish.

"If you should happen to find it please let me have it for I have lost a very valuable document," said the Major.



A REAL AMERICAN
By Richard E. Weaver, Pennsylvania

That afternoon Nancy thought a lot. If that paper was worth so much to Major Livingston, it must contain some news relating to the army. Then Nancy thought of a plan. She would take the paper to Mr. Morris, who lived in a cottage not far from her home. She had often heard her mother



Drawn by Laird Wise, Maryland

er say that she was afraid Mr. Morris would be caught sending messages to the Continental Army. If it was of any importance he would be able to tell her and if it was he could find some way to get it to Washington or one of the other Generals.

Nancy Helps Win the War

Nancy decided she had better deliver it that very day for if Major Livingston suspected her, she might not be able to deliver it for some time and then it might not be of any use.

When Nancy returned she felt very happy for Mr. Morris had not only promised to give the note to someone who would take it to Washington but he told her that as soon as he received any news of its message he would let her know.

Four months had passed and Nancy had heard nothing about the paper she had given to Mr. Morris. Many things had happened that had made Nancy very happy. Had not the British been driven from Philadelphia and had not she helped to make the very flag that waved from the top of Carpenter's Hall?

One day when Nancy was embroidering in her room her brother ran in waving a letter above his head and shouting, "Father is coming! Father is coming!"

"Oh! When? When?" cried Nancy. "He says he will be here on the 27th and that is tomorrow," said Andrew. Then Nancy's mother called her to help with the work. All that afternoon Nancy helped her mother and

when night came, although she was very tired she was as excited as ever.

The next morning Mr. Standish arrived long before breakfast. It was then that Nancy learned what the note had been about. General Washington and his men had deciphered the writing which directed them to a house along the Delaware. The note mentioned a sliding panel at the right of the fire place in the living room of this house. In the secret hiding place was found a large sum of money and a very good map of eastern Pennsylvania. The money had been used to buy food and clothing for the soldiers while at Valley Forge. The map



By Alta Louise Cowan, Pennsylvania

OUR FLAG

Our flag, how we love it!
The red, white and blue
Our flag, how we love it!
All citizens do.

The red is for valor
That's bravery, you know;
The white is for purity,
Pure as snow.

The blue is for justice,
For every man,
And our country helps us,
Whenever it can.
—Ida Wise.

Little Folks

Clara Visits Grandmother

(Continued from last week)

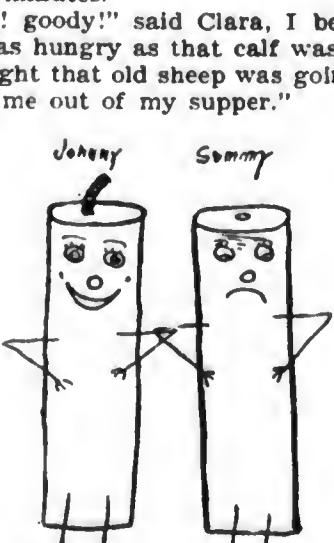
Clara was very much frightened when the calf came bounding toward her, and her first impulse was to run, but she did not want Uncle Don to know she was afraid of a calf so she held the pail as tight as she could. The calf was in such a hurry he almost upset the pail and Clara too, but he finally got his nose in the pail and drank so fast Clara was afraid he would strangle.

After putting the calf into his pen they all went into the milk house to strain and cool the milk.

Grandmother called Clara and asked her to go to the orchard and get some soft peaches for supper. Clara took the little basket and hurried to the orchard, which was only a short distance from the house. She climbed the fence and began picking the soft juicy peaches when she heard a noise some distance behind her, and upon looking she saw Grandfather's old ram, coming toward her with his head down. She threw her basket at him but on he came, so she quickly climbed a tree, thinking he would soon go away. But he did not go away and Clara wondered what to do. Would they come to look for her and scare that old ram away before dark? Yes, the hired man had found the ram missing when he went to put the sheep into the pen for the night, and Clara was greatly relieved to see him coming to drive the animal home.

She gathered her peaches and ran to tell her grandmother why she was late. Grandmother said, "I had just started to look for you, child, come into the house and wash your face and hands, we are going to eat supper in a few minutes."

"Oh! goody!" said Clara, I believe I am as hungry as that calf was, but I thought that old sheep was going to cheat me out of my supper."



By M. J. Beech...

Firecracker Twins

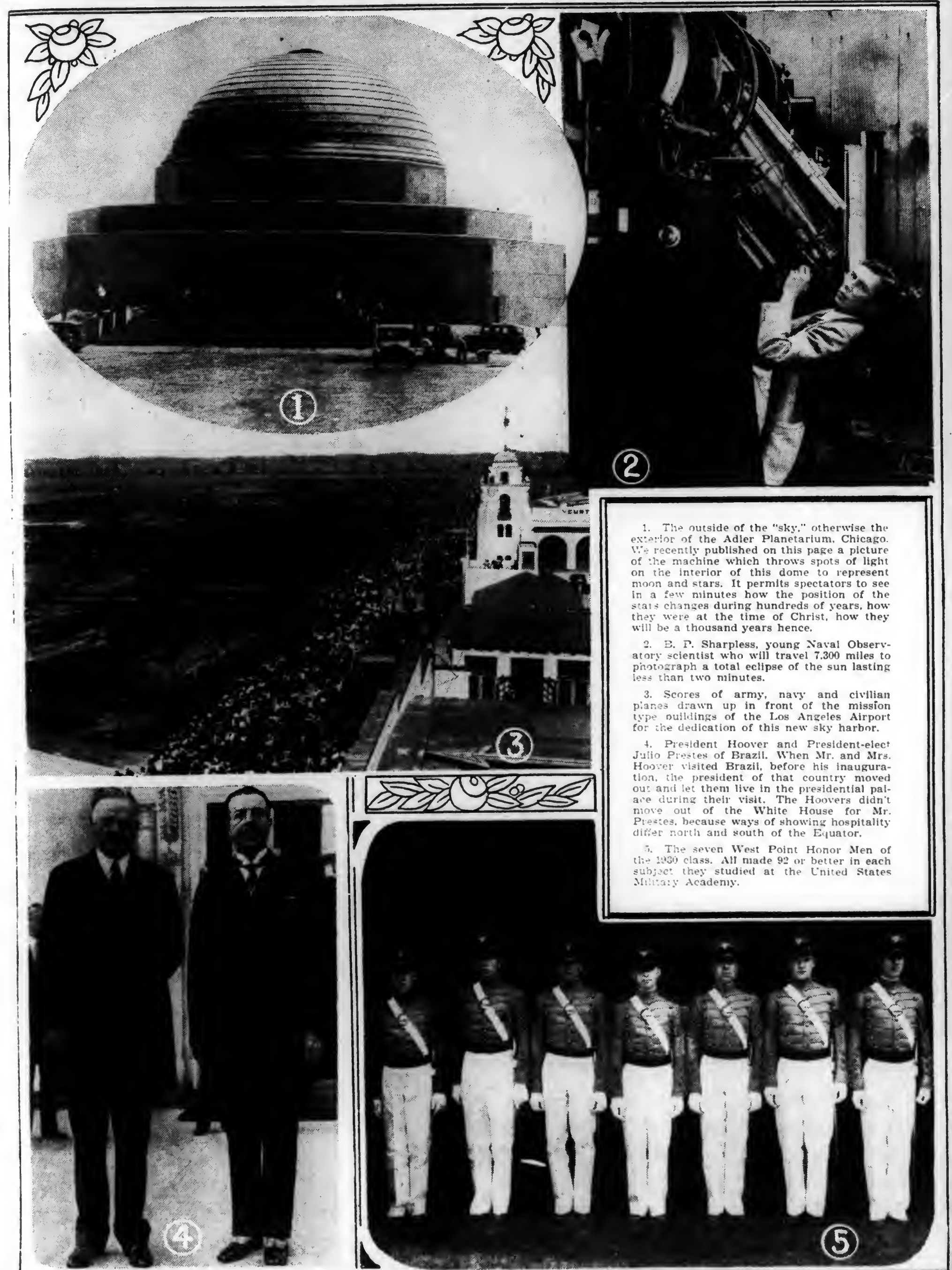
JOHNNY and Sammy Firecracker were brothers. Sammy was a very grouchy person while his brother Johnny was very pleasant.

But each were planning for a grand and glorious Fourth.

A very nice and careful boy bought Johnny and took good care not to pull out the cord on top of his head. But a very careless little boy bought Sammy and pulled the cord out of the top of his head and then Sammy had to be thrown away.

On the Fourth Johnny was lighted and thrown into the air and made a very loud boom, and we may be sure Johnny was happy, because he did his duty.
Emily Beech.

PASSING EVENTS IN PICTURES



1. The outside of the "sky," otherwise the exterior of the Adler Planetarium, Chicago. We recently published on this page a picture of the machine which throws spots of light on the interior of this dome to represent moon and stars. It permits spectators to see in a few minutes how the position of the stars changes during hundreds of years, how they were at the time of Christ, how they will be a thousand years hence.

2. B. P. Sharpless, young Naval Observatory scientist who will travel 7,300 miles to photograph a total eclipse of the sun lasting less than two minutes.

3. Scores of army, navy and civilian planes drawn up in front of the mission type buildings of the Los Angeles Airport for the dedication of this new sky harbor.

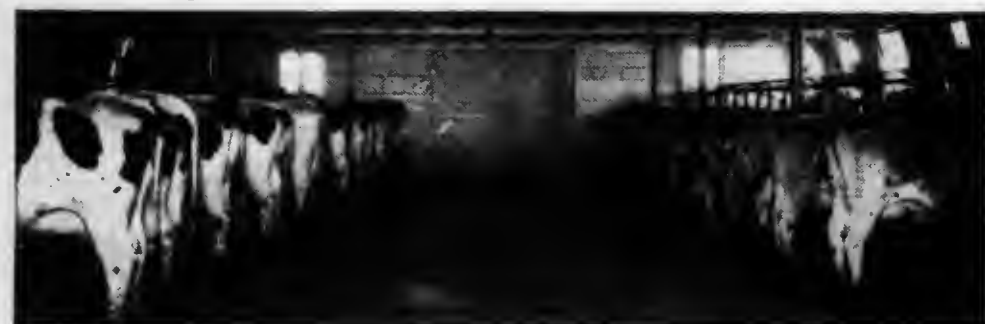
4. President Hoover and President-elect Julio Prestes of Brazil. When Mr. and Mrs. Hoover visited Brazil, before his inauguration, the president of that country moved out and let them live in the presidential palace during their visit. The Hoovers didn't move out of the White House for Mr. Prestes, because ways of showing hospitality differ north and south of the Equator.

5. The seven West Point Honor Men of the 1929 class. All made 92 or better in each subject they studied at the United States Military Academy.

The Tails Tell the Tale

THE Holsteins on the left of this picture were sprayed with Dr. Hess Fly Chaser. The Guernseys on the right were not.

On the Holstein side, all quiet and restful. On the Guernsey side, every cow swishing, tossing her head and stamping. It was the same way in the pasture too.



Dr. Hess Fly Chaser has the odor of the pines. The pine odor principle was proved to be the most efficient and longest lasting in 300 tests with many fly-repelling materials. (Dept. of Agriculture Bulletin 1472.)

Dr. Hess Fly Chaser is a protector that really protects. Its fresh, pine-woods odor, so agreeable to you, is positively repulsive to flies. It stays with your sprayed cows and repels flies all day long.

Don't confuse it with household "fly killers" which, to be effective, must be used in tightly closed rooms. Dr. Hess Fly Chaser is for livestock only — a protector of cows and horses out in the pasture and in stables and barns.

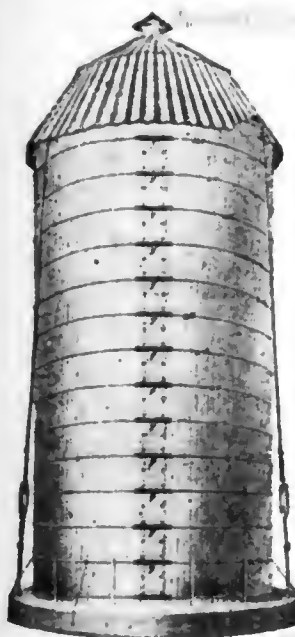
Dr. Hess Fly Chaser has antiseptic and germicidal value. It kills every disease germ it comes in contact with. It does not gum or discolor the hair. It does not taint the milk.

WARBLES. On the twenty cows that were sprayed regularly with Dr. Hess Fly Chaser at the Research Farm only two ox warbles were found. Of three cows that were not sprayed during the fly season one had 15 grubs in her back, another had 9 and the other 8. Protect your cows from warbles as well as all other fly pests by using Dr. Hess Fly Chaser regularly.

The local Dr. Hess dealer will supply your needs. Call on him.

Dr. Hess & Clark, Inc., Ashland, Ohio.

Dr. Hess Fly Chaser



1892-Thirty-Eight Years of Satisfaction-1930

Buy A TORNADO OREGON FIR SILO

single or jointed stave, complete with galvanized gambrel steel roof and steel chute.

SAVE YOUR HAY

THE WORST HAY CROP since 1912 makes a SILO a necessity on your farm this WINTER.

Write today for our DIRECT to farmer prices. SAVE agent's commission and FREIGHT. Our PRICE will interest you.

THE W. R. HARRISON COMPANY
MASSILLON OHIO
Manufacturers

SWINE

DUROCS.—Service hogs, sows and gilts bred for Ang. & Spitz, farrow, spring pigs. Best blood lines. J. W. Williamson, Murraysville, W. Va.

BUY A PAIR of my 12 weeks reg. Berkshire sow pig and watch them make you money. W. E. McFARRAY, Farmville, Pa.

Feeding Pigs, 15 to 20 lbs. \$4.50 to \$8.00 according size. Truck delivery on large lots. Monty Poland-Chinas, Stanley Short, Cheswold, Del.

LARGE BERKSHIRES all ages of both sexes for sale. Dilts & German, Roseville, Ohio

POLAND-CHINAS of approved blood lines, bred sows, service hogs, eligible to registry. For particulars, address C. S. Epler, Zanesville, Ohio

BIG TYPE POLAND-CHINAS. Choice blood pigs, 2 to 4 mos. old, \$12.00 with pedigree. Jesse McLaughlin, Reinerstown, Ohio

Buy Hall's Superior Type Poles. High-class, registered, healthy and thrifty. G. S. HALL, Farmdale, Ohio

QUALITY CHESTER WHITE. Oct., 1929, gilt, bred for fall litters. Shipped C.O.D. on approval. A. H. Crownever, Mt. Sterling, Ohio

Chester White Pigs properly mated. Write your wants. C. L. MUNCE, Canonsburg, Pa.

CATTLE

BEECHWOOD SHORTHORNS Choice bull calves up to nine months of age. Reasonably priced. C. C. LEWIS, Point Pleasant, West Virginia

BUCK & DOE RUN VALLEY FARMS Hereford Cattle—Poland-China Hogs—Hampshire Pigs—Draft Horses. THE SAINT ARBOUR COMPANY, Mortonsville, Penna.

Angus Cattle at reasonable prices. Write BAYARD BROS., Waynesburg, Pa.

PLEASE mention Pennsylvania Farmer when writing to our advertisers. They want to know and we want them to know that you read it all.

Farm & Dairy

By L. W. LIGHTY

THE old saying is we lock the door after the horse is stolen. So we changed the name of the fertilizer made by treating pulverized phosphate rock with sulphuric acid from acid phosphate to superphosphate after the damage was done in folks' minds. In the mind not chemically trained acid means sour and an acid fertilizer is supposed to make the soil sour. Of course this is all a mistake and had the fertilizer never been called acid the misunderstanding would not have occurred. Let us hope the next generation will not be troubled with this misconception.

I write this because as always letters continue to come asking if it is safe to use this "rock goods" or what to do to correct the trouble it is supposed to have made. Let us try to understand that this acidulated rock or superphosphate will not sour the land nor should it sour the disposition of the user; but it is an excellent fertilizer where nitrogen and potash are not needed. One correspondent got superphosphate and sulphate of ammonia confused when he says the former used on plots at our Experiment Station rendered the soil so sour nothing would grow. Sulphate of ammonia did this but not superphosphate.

The Pig as a Grazer

A man who produces considerable pork for the market came to see me to discuss hog pasture. He desires a permanent hog pasture adjacent to his timber lot which is a permanent run for the swine. I was not able to suggest any plant that would in any sense be permanent as we speak of permanent pastures because the hog is a rough grazer and wants and seemingly needs some roots and some earth in its ration.

I suggested alfalfa as possibly the nearest of any good hog pasture but if it is considered permanent there will be disappointment. With care it will last several years. By care I mean the alfalfa must have periods when it can make six or eight inches of growth undisturbed. Undoubtedly alternating between an area of alfalfa and dwarf Essex rape is the most economical and profitable hog pasture.

By Telephone

It is nothing unusual to get a telephone call for information on farm procedure but yesterday I had a long distance call from a man who was just cutting his 40 acres of grass saying it will yield a third of a crop and he has to plow it as soon as cut and seed something on it before July for rough feed.

"What shall I plant," was the question. The answer was expected on the spur of the moment. Rather a momentous question. Was the stand of clover good on the field? Pretty good but the extreme lack of moisture and the great heat sent it into heads at four to six inches of growth. Was I to tell this man if he would give that clover a chance it may make an aftermath that will be worth more than the first crop? If it has the moisture. But what will grow without moisture?

Plowing up this sod will break in on the crop rotation and possibly greatly reduce next year's corn crop. Plowing and seeding will cost between one and two hundred dollars. For that sum a lot of hay might be bought. Corn might be planted or soy beans or Sudan grass might be sowed, or the two might be sowed together; but if the latter part of the summer was as dry as the first part there would be a very short crop.

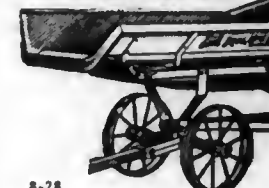
We agreed after a little talk that the sod would remain and the chances for an aftermath would be taken, and on at least part of the field fertilizer and manure would be applied as soon as the hay is off. I am not sure that my advice was orthodox but I am very sure it is in line with good farming

Send for Amazing Facts About the

Break Sales Records

GEHL LOW SPEED BIG CAPACITY SILO FILLER

Positively self-feeding, can not clog, will leave roller, improved fan blade arrangement, gears running in oil, ball bearings, wear of rollers to blades make the GEHL the world's highest running and cleanest cutting cotton capacity of 45 feet high at only 500 R.P.M. Other features: higher speed, Wisconsin dairymen appreciate the safety, big capacity, durability and low power costs of the GEHL, hence 45% of all silos sold in that state are GEHLs. Write for catalog. GEHL BROS. MFG. CO., 425 S. Water St., West Bend, Wis.



8-28

You Are After Profits?



STRUVEN'S FISH MEAL—made from the WHOLE Menhaden Fish fresh from the coast—will make money for you because it lowers the cost of producing meat, eggs, and milk. The new production is now available. Write us immediately for FREE SAMPLE and BOOKLET.

CHAS. M. STRUVEN & CO.
114-116 S. Frederick Street
Baltimore, Md.

AYRSHIRES

MOST PROFITABLE COWS

Big Milkers - Hardy Rustlers
Good Grazers - Perfect Udders
Ayrshire Breeder Association,
205 Center St., Brandon, Vi.

CRAWFORD COUNTY, PENNA.

NEGATIVE COWS.—Blood testing for contagious abortion is being done on a large scale in Crawford County. We have been free of T.B. for years. The fifth census in the United States to become a modified accredited area. Write us for details and prices. Crawford Co. Co-Op. Dairy Imp. & Sales Ass'n, Meadville, Pa.

DAIRY CATTLE

5 JERSEY BULL CALVES

aged from 1 to 3 months. Excellent type. Solid color. Straight backs, long and deep bodied. All out of Register of Merit dams and sired by good grandsons of old Bull's Gamble. Priced at \$25.00 each for quick sale. Federal Accredited Herd and blood tested. Highland Farms, Greensburg, Pa.

REG. JERSEY BULLS. ready for service. Bull calves, also bullfrogs. Accredited Herd. C. F. & M. W. BIGHAM, Ostrycburg, Pa.

AYRSHIRE CATTLE of the best blood lines. Herd F. B. Accredited. Animals of both sexes and all ages. Geo. B. McConnell, Wellington, Ohio

FOR SALE.—A few exceptionally fine Brown Swiss Bull Calves, of outstanding breeding. T. B. tested. J. Earle Dull, M. D., Somerset, Pa.

—AYRSHIRE BABY BULL CALVES— Also up to six months, choicest breeding, high record stock. Herd tested for production and fully accredited. Guaranteed in please. AT FARMER'S PRICES. J. C. DEWITT, Kennel, N. Y.

Holstein Bulls for sale, from an accredited herd. From K. P. O. P. 52, the 1,000-lb. bull and 4% bull. Also females. Also noted show going. All good workers. SWEET BRIAR FARMS, J. E. Patterson, Supr., Chesterland, Ohio

—REGISTERED BELGIAN MARE— 5 yrs. old, weight 1,000 lbs., bred to Lordship II. Also her stallion colt, eleven months old, sired by Lordship II. Also her yearling blue roan show by Lordship II. Also her yearling blue roan show by Lordship II. Also her yearling blue roan show by Lordship II. All good workers. SWEET BRIAR FARMS, J. E. Patterson, Supr., Chesterland, Ohio

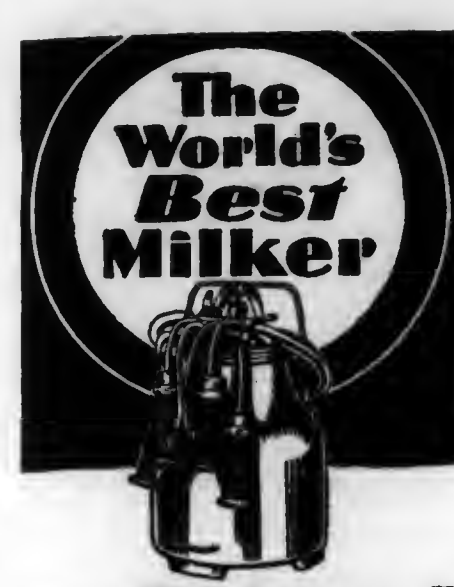
HORSES

—REGISTERED BELGIAN MARE— 5 yrs. old, weight 1,000 lbs., bred to Lordship II. Also her stallion colt, eleven months old, sired by Lordship II. Also her yearling blue roan show by Lordship II. Also her yearling blue roan show by Lordship II. All good workers. SWEET BRIAR FARMS, J. E. Patterson, Supr., Chesterland, Ohio

—REGISTERED BELGIAN MARE— 5 yrs. old, weight 1,000 lbs., bred to Lordship II. Also her stallion colt, eleven months old, sired by Lordship II. Also her yearling blue roan show by Lordship II. Also her yearling blue roan show by Lordship II. All good workers. SWEET BRIAR FARMS, J. E. Patterson, Supr., Chesterland, Ohio

KEEPING UP

Readers of Pennsylvania Farmer can't afford to miss a single issue. Watch the label date of your paper and don't let your subscription expire. We'll stop papers promptly on expiration, unless you renew.



The DeLaval Magnetic Separator has 15 Exclusive Features

Not found on any other milker.

Milks faster, cleaner, gives longer and more reliable service than any other. SEE and TRY it—FREE of any charge.

See your De Laval dealer or write nearest office below.

The De Laval Separator Company
NEW YORK 165 Broadway CHICAGO 600 Jackson Blvd. SAN FRANCISCO 61 Beale St.



EASY, CLEAN & FAST THRESHING

with a FARQUHAR "ALL STEEL"

Here is our new, modern Thresher. Endorses all the best ideas obtained from hundreds of successful threshers. It is so easily operated, uses little power because equipped with Roller Bearings and Rockwood Pulleys. Does a nice, clean job of threshing any kind or condition of grain. Has large capacity and built to endure the heavy strains of long, hard seasons.

Write for Bulletin 222 and learn the results of both threshermen and farmers.

We also build Engines, Rollers, Saw Mills, Hay Balers, Cider Presses and Farm Implement. Catalogue upon request.

A. B. FARQUHAR CO., Limited
Box 546 YORK, PA.

Buy now. Pay later

A MONEY MAKER Better feed—lower costs—more profits. Booklet "Users Own Words" written by owners proves it. Write for free copy. Write your name and check below items for illustrated folders.

The Ross Cutter & Silo Co., 106 Ward St., Springfield, O. Established 1850

Silos Stanchions
Cribbs
Boulder Houses

Phil's

Phil's

Phil's

Phil's

Phil's

Phil's

Phil's

If we consider the crops for the next two or more years.

Some Explanations

Very often explanations do not explain. For three years in this territory we had practically no Colorado potato beetle. Frequently the man with a small patch did not see a single bug. We were told since everybody sprays the potatoes the Colorado beetle is being exterminated. It surely looked so last year but this spring they came down on our patches everywhere by the million. Plants not sprayed were completely eaten up. What explanation now?

Good Year for Association

NEXT to the best year in its history is the record for 1929 reported for The Holstein-Friesian Association of America at the annual convention in Denver, June 3. Measured by the number of registration and transfer certificates issued, 1921 was the record year with a total of 258,246 certificates, but last year was second best with 219,456, an average of 18,288 a month, earning \$410,558.50, an increase of \$2,720.50 over 1928. The total cash receipts for 1929 were \$467,578.08, exceeding the returns for 1928 by \$8,319.83.

During 1929, applications were filed for the first time by nearly 1,000 new breeders each month. A total of 1,891 new members were admitted to membership during the year, an increase of 47 over 1928 and next to the greatest number for any one year. During the year, 628 names of deceased members or of limited ten-year memberships were removed from the lists leaving a total on December 31, 1929, of 30,796 active members.

States showing the largest increases in membership with their totals of new members are: New York, 305; Wisconsin, 199; Pennsylvania, 194; Illinois, 177; Minnesota, 171; Michigan, 106; and Ohio, 105.

The National Association is in sound shape financially with total assets on December 31, 1929, of \$521,741.33 and total liabilities of \$72,431.35, leaving a net worth of \$449,309.98, an increase of \$14,206.93 over the preceding year. The assets include approximately \$240,000 cash on deposit at interest or payable on demand, \$184,000 in bonds, \$2,000 in accrued interest, \$24,000 in real estate, and \$71,000 in sundries including inventories.

The Holstein-Friesian Association of America has now completed its 44th year of operation. It is estimated that between 600,000 and 700,000 pure-bred Holsteins are now on farms of the United States.

Cow Testing Ass'n Report

Dauphin C. T. A. Ends Second Year

THE Dauphin County Cow-Testing Association closed its second year June 1, 1930, with eighteen whole-year members. In addition there were three whole-year members in the Association on bi-monthly test, who are included in this report. Furthermore, there were six part-year members. The total number of cows for all or part of one year was 481.

The results for the two years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1929	315.01	7357	275.9
1930	263.23	8226	289.5

Eight herds with an average of five or more cows produced over 300 pounds of butterfat. A complete list follows:

Owner	Breed	Lbs. Milk	Lbs. Fat
Daniel C. Romberger	R.G.H.	11,169	382.9
Aaron Erdman & Sons	R.G.H.	10,562	316.3
Chas. K. Fertig	R.H.	10,727	315.1
Howard Speere	R.G.H.	10,453	339.7
Lyle Bros.	R.H.	10,672	334.1
Harrisburg State Hospital	R.G.H.	9,685	312.3
John A. Dehler	R.G.H.	9,353	307.9
R. B. & M. E. Rutherford	G.H. & G.G.	7,805	303.5

One herd of the bi-monthly members produced over 300 pounds of butterfat:

Owner	Breed	Lbs. Milk	Lbs. Fat
C. H. McElwee	R.G.H.	10,874	371.9
Rufus F. Patton	A. S. Frommeyer		

These Astounding Results

Astounding results! Yes! Cold, hard facts! Facts that answer once and for all, the old question "Does grain with pasture during the summer pay dividends fall and winter as well as in summer?"

These facts settle it!

Group 1. Cows started on pasture only June 1, 1929 dropped from 45.6 lbs. of milk to an average of 14.5 lbs. in September! Then back in the barn on full regular winter feeding, they showed a loss of \$15.78 per cow from October 1 to February 1! Over the entire test period, from June 1 to February 1, all the profit they could show was \$51.43 per cow!

Group 2. Cows started on Larro and pasture June 1 with a production of 49.1 lbs. daily, dropped to 32.2 lbs. average in September. Then back in the barn on full regular winter feeding, they showed a profit of \$17.05 per cow from October 1 to February 1. Over the entire test period, they showed a profit of \$85.89 per cow!

Group 3. Cows started on pasture, Larro, hay and silage June 1, with a production of 46.8 lbs. of milk, dropped to 40.9 average in September. Then back in the barn on full regular winter feeding, they showed a profit of \$38.47 per cow from October 1 to February 1. Over the entire test period, they showed a profit of \$113.85 per cow—more than twice the profit of group 1!

At the start of this Larro Research Farm test, all cows were producing at the same level—all had freshened at the same time. From October 1 to February 1 all were fed hay, silage and Larro. Check their records point by point! Their records tell this truth—that not only summer, but fall and winter profits depend on the right summer feeding schedule. A copy of the complete report of this test will be sent upon request.

THE LARRO MILKING CO. DETROIT, MICHIGAN

Larro

FEEDS THAT DO NOT VARY FOR POULTRY, HOGS & DAIRY

Larro Family Flour, best for Bread, Biscuits, Cake and Pastry.

Larro

Larro

Larro

Larro

Larro

Larro

Larro

Larro

Larro

Larro

Larro

Larro

Larro

Larro

Larro

Larro

Farmer's Business Letter

PRICES of farm products, and all other commodities as well, continue at a low level, with trends generally toward the weak side. For many it is real hard times, and reminiscent of the panics of the past. Thus, on some sheep shipments the net return is almost negligible.

Crop conditions continue highly favorable, so favorable in fact that some producers are worried about the return, and suggestions have appeared that a share of the wheat should be left standing in the field, or a counter suggestion that a share of it should be fed to livestock. Some demand is appearing that the Farm Board should begin stabilizing operations in new wheat, but the board has announced that it has made no plans in that direction.

Half Year Live Stock Trade

During the first half of this year live stock prices have ranged below the same period last year. Cattle and lambs sold during this period at the lowest prices in several years. The average price of cattle for the six months, January to June, was about \$12.50 below last year. Receipts at seven points were less than 2 per cent smaller than during the first half of last year.

Their buy of hogs during the first half of the year cost packers about \$1.25 a head less than their purchases during the first half of 1929.

The sheep story is a sad one from the standpoint of the producer. The average lamb price was \$5.25 lower during the six months of this year than during the same period of last year, and seven markets handled nearly 900,000 more lambs than during the first half of 1929.

Hogs Again Lower

Further substantial losses in hog prices occurred this week, with some little recovery at the close. Average price for the week at \$8.80 was 85 cents under last week and \$1.95 lower than a year ago. The market was not overloaded. Eleven points had 518,000 hogs against 523,000 last week and 522,000 a year ago. Shipping demand was good. Weight is running heavy, the average this week being 250 pounds, reflecting the rather liberal marketing of sows, a little earlier than last year. The hog futures market declined with the cash market, and about to the same extent.

The Year's Hog Supply

Statistically, the hog market should be in a strong position, but the general trend of commodity prices is too much for it. Added to the strong side of it is the government pig report this week. Under any other conditions this report would be regarded as very bullish. It indicated a decrease of about 1 per cent in the spring pig crop of 1930 from that of 1929 for the United States as a whole.

Cattle Do Better

Next to the smallest week of the year in cattle marketing helped to reverse the situation this week, though the opening was weak and materially lower. The run for the week at 33,000 was 7,000 under last week. Bulk of this week sold at a range of 9.25 to \$11.25, with a top of \$12.65, the former comparing with \$9.00 to \$10.75 and the latter with \$12.75 last week.

The country responded to warnings to hold down receipts this week, but with any showing of strength it is expected that plenty of cattle will appear, and it still doesn't take many to be so many under present conditions.

Sheep Decline

All kinds of sheep stock were lower this week, lambs 25 cents to \$1.00 lower, and sheep nearly as much lower, the largest decline on the poorest quality. And there is plenty of the low quality stuff. Receipts were moderate, on lambs brought \$12.45 early but were nearly a half dollar lower at the close. Average lamb price of the week was \$11.30 was 35 cents lower than last week. The trade is discounting lamb mbs sharply, some bringing \$2.00 a head, not a great deal more on marketing cost.

Grains Weak

There was some further net loss in grain prices this week. To satisfy worst about what the Farm Board might say with the wheat of the last crop. The last statement was issued claiming that such wheat would be sold off the market so as not to enter competition with the new crop. The Farmer's National Grain Corporation expects to handle upwards of 300,000 bushels of wheat this year, about pegging the price.

Out of Work

On a big building operation now under way in Chicago something like a thousand men appear every morning asking for work. The other day a labor union agent strutted in and proceeded to lay down the law to the superintendent. He demanded that only union men be employed. The superintendent, with a gesture toward the crowd of applicants outside the gate, said "Shall we go out there and tell them what you have just said to me?" The agent wilted and disappeared in another direction, not caring to expose himself to the mob fury that would have been inevitable had his message been conveyed to those desperate for work. Chicago, June 28, 1930 Watson.

Produce Market Review

THE Philadelphia egg market showed some improvement during the past week. Prices held steady during the early part of the period and advanced slightly toward the close. Country costs in the west continued above a parity with prices on the local market and receivers were forced to store part of their receipts, or take a loss. Reports from producing sections indicate that the extreme hot weather which prevailed last week will undoubtedly result in a poorer run of eggs during the next week or ten days.

The egg market in New York was irregular. Receipts showed some reduction but the tone of the market was weak. The surplus in warehouses is mounting and there is a general lack of confidence. At the close of the week nearby hennerly whites ranged from 25c per dozen on mediums up to 32c on closely selected extras. Brown eggs sold at 24c to 34c, mixed colors at 20c to 27c and Pacific Coast white eggs at 27c to 34c.

Poultry and Butter

The live poultry market in New York was steady on the best stock. Receipts of broilers were liberal and fancy heavy broilers sold readily. Light weight and poor stock were hard to move. Fowl were in lighter receipt but sold slowly. Fresh receipts of dressed poultry from nearby sections were

light but the demand was limited and prices about steady.

Butter prices fluctuated frequently but price changes were only fractional. This uncertain condition reflects the sentiment of buyers and sellers. The statistical position of the market is improved somewhat and reports of lower production are favorable, but this is offset by lower prices on all important commodities.

Potatoes Weak

The Eastern potato markets were generally weaker during the latter part of the week, due to liberal supplies and heavy shipments. The carlot movement of potatoes averaged around 1,000 cars daily. The bulk of the supply is now coming from the Eastern Shore and Norfolk section of Virginia. It now appears that the eastern part of the country will draw their supply of potatoes from the Eastern Shore districts until mid July. The crop in Maryland is reported to be extra fine quality.

New Jersey and Long Island have large crops and if prices make any material advance the season in those sections will open earlier than usual. Light truck receipts of Cobblers are already arriving in Philadelphia from southern New Jersey.

The strawberry season is over and very few odd lots of Pennsylvania berries were offered this past week. The strawberries are being replaced by liberal supplies of other berries and small fruits. The outstanding point of interest in the berry line was the receipt of cultivated blueberries from New Jersey. This stock sold at \$1.00 per quart. A few early varieties of peaches are arriving from New Jersey and are in fair demand.

The New Jersey tomato season opened this week and sold at high prices. The best brought \$4.00 a 4.50 per bushel and poorer stock brought 3.00 to 3.50.

W. R. Whitacre

FEED MARKET

The following quotations are for transit and nearby shipment June 24, according to the U. S. Bureau of Agricultural Economics. They show the approximate cost of feed per ton (all in 100 lb. sacks) and grain per bushel in carlots arrival draft basis delivered on track at Philadelphia and Scranton rate points:

Barley, 82¢; standard middlings, \$29.50; flour, middlings, \$32; cottonseed meal, 43¢ per cent, \$45.50; gluten feed, \$37.50; No. 2 white oats, 45¢; No. 2 yellow corn, 94¢.

LIVESTOCK

PITTSBURGH Cattle

About 40 carloads of cattle were on sale at Pittsburgh the first day of this week. A large part of the receipts was steers, and the average quality of the offering was rather better than a week ago. Good steers were strong to a quarter higher, while other kinds were slow at about steady prices. One load of 1,150-lb. cattle brought \$11. Very good yearlings went at \$10.15, while the bulk of fed steers sold at \$10.10 to \$10.50. Fair to good butcher steers went at \$9.50 to \$10.50, with some kind around \$8. Inferior and plain cattle were slow at \$7.00 to \$8. Not many heifers were offered. Those here went mostly at a range of \$6.50 to \$8 according to quality. Cows were in light supply and about steady in price, pretty good fat cows bringing \$7.50. Bulls were about steady on the basis of \$7.75 for choice handy butcher bulls and \$7.25 for good heavy bulls.

Prime fat steers \$10.75 to \$11.00
Choice steers, 1,200 lbs. or over 10.35 to 10.75
Good to choice, do. 9.75 to 10.35
Fair to good, do. 9.25 to 9.75
Plain heavy steers 8.00 to 9.00
Choice handy-weight steers 10.50 to 10.75
Good butcher steers, 1,000 to 1,150 lbs. 9.00 to 10.00
Fair to good, do. 8.50 to 9.00
Ordinary to fair, do. 8.00 to 8.50
Common, do. 7.50 to 8.00
Good light butcher steers 9.50 to 10.00
Fair to good light steers 9.00 to 9.50
Common to medium, do. 8.00 to 8.75
Inferior light steers 7.00 to 7.50
Feeder Steers Nominal
Choice fat heifers 8.50 to 9.00
Good to choice heifers 7.75 to 8.50
Fair to good heifers 7.00 to 7.75
Common to fair heifers 6.00 to 7.00
Choice fat cows 6.75 to 7.50
Good to choice fat cows 6.25 to 6.75
Fair to good cows 5.50 to 6.25
Common to fair cows 4.50 to 5.25
Canners 5.00 to 6.00
Fresh cows, calf at side 50.00 to 100.00
Choice heavy bulls 7.00 to 7.25
Choice handy butcher bulls 6.50 to 7.50
Good handy bulls 6.75 to 7.50
Fair to good bulls 6.25 to 7.00
Common to fair bulls 5.50 to 6.25
Inferior bulls 5.00 to 6.25

Receipts amounted to 22 carloads. The market was fairly active on the basis of \$9.75 for best handy weights and \$9.40 for

for heavies. Pigs, underweights and sows were strong to a quarter higher; other grades steady.

Heavy mixed 9.00 to 9.25
Medium mixed 8.50 to 9.00
Light mixed 8.00 to 8.50
Heavy Yorkers, 125-150 lbs. 9.75 to 9.50
Light Yorkers, 125-150 lbs. 9.25 to 9.50
Pigs, 90-110 lbs. 7.00 to 8.25
Roughs 7.75 to 8.00
Stags 5.00 to 7.00

Sheep and Lambs

Twelve carloads made up the supply. The market was rather weak to lower. Lambs were generally quoted at \$10.11 to \$11.50 and choice yearlings at \$8.

Clipped

Good to best wethers \$3.75 to 4.00
Good mixed 3.25 to 3.75
Fair to good, do. 2.75 to 3.25
Common to fair 2.00 to 2.50
Inferior sheep 1.00 to 2.00
Yearlings 5.00 to 8.00
Good to choice lambs 11.00 to 11.50
Medium, do. 9.00 to 10.00
Culls and common, do. 7.00 to 9.00

Calves

With 1,400 calves on sale the market was steady. Top vealers sold at \$11.50.

LANCASTER Cattle

Lancaster, June 30.—Receipts totaled 825 head. Beef steers weak to 25c lower. Early top \$10.50, on 1,550-lb. cattle. Bulk of sales was at \$8.25 to \$10.

About 200 calves were on sale. Market steady with top vealers at \$12.

Hogs

Three hundred hogs were on sale. The market was slow at steady prices. Medium and light weights are quoted at \$10.25 to \$10.75, heavies \$10.10 to \$10.50.

CHICAGO Cattle

Chicago, June 30.—Cattle receipts amounted to 18,000 head. The market was 25¢ to 50¢ lower with top at \$12.25.

Hogs

Forty-four thousand hogs, including 22,000 "directs," were received. The market was steady to a dime higher. Top hogs \$9.30, bulk \$8.50 to \$9.30.

Sheep

Eight thousand sheep and lambs were on sale. The market was 25¢ to 50¢ lower. Best lambs sold at \$11.50.

Produce Market Quotations

PHILADELPHIA

Butter.—Higher than extras, 35¢ to 38¢; 92 score, 34¢; 90 score, 31¢.

Eggs.—Fancy select, 28¢ to 30¢; extra firsts, 27¢; firsts, 25¢; seconds, 20¢ to 21¢.

Poultry.—Live fowls, 23¢ to 25¢; broilers, 26¢ to 30¢; old roosters, 15¢ to 18¢; pigeons, pr. 15¢ to 25¢; chickens, 15¢ to 20¢; turkeys, 16¢ to 25¢.

Fruits.—APPLES, N. J., ½ bkt., Starrs, 75¢ to \$1.15; Transparent, 50¢ to \$1. BLACKBERRIES, 32-qt. crates, N. J., \$5.50 to \$6; Md. & Del., best, 45¢ to 50¢; HUCKLEBERRIES, N. C., 32-qt. crates, \$8.90 to \$9.00; RASPBERRIES, N. J., per pt., 10¢ to 20¢; CHERRIES, N. J., sour, per lb., 6¢ to 8¢; CURRANTS, N. J., 32-qt. crates, \$4 to \$4.50.

Vegetables.—ASPARAGUS, doz. bunch, crates, 50¢ to \$2.50; BEANS, (snap), N. J., ½ bkt., green, 25¢ to 50¢; (wax), 25¢ to 35¢; Md. & Del., bus. green, 25¢ to 50¢; wax, 10¢ to 35¢; BEANS, (lima), N. C., bushel, hmpres, 33¢ to 35¢; Pa. & N. J., per bunch, 1¢ to 3¢; CARROTS, Pa. & N. J., per bunch, 1¢ to 2¢; CABBAGE, N. J., ½ bkt., 25¢ to 35¢; Pa. bus., 40¢ to 50¢; CELERY, N. Y., bunches, 50¢ to 85¢; N. J., washed, small bunches, 33¢ to 37¢; CUCUMBERS, Maryland, bus. hmpres, 60¢ to 75¢; Del., round bus. hmpres, \$1.25 to \$1.50; CAULIFLOWER, L.I., heavy crates, \$1.25 to \$1.50; KOHL RABI, Pa. & N. J., per bunch, 1¢ to 3¢; LETTUCE, N. J., crates Big Boston, 50¢ to \$1; ONIONS, N. J., ½ bkt., yellows, 75¢ to 90¢; PEAS, N. J., ½ bkt., 75¢ to \$1.25; PARSLEY, Pa. & N. J., bushels, 4¢ to 5¢; PEPPERS, N. J., ½ bkt., sweet, 30¢ to 40¢; RHIBARB, Pa. & N. J., per bunch, 12¢ to 25¢; SPINACH, Pa. & N. J., bus., 65¢ to 75¢; SQUASH, N. J., ½ bkt., white, 75¢ to \$1; green, 15¢ to 50¢; TOMATOES, N. J., ½ bkt., \$4 to \$4.50; POTATOES, Del., 100-lb. sacks Cobblers, U. S. No. 1, \$2.40 to \$2.25.

Butter.—Country, 40¢ to 50¢; separator, 50¢ to 55¢.

Eggs.—Fresh, 24¢ to 28¢.

Fruit.—Dressed hens, 1¢ to 2¢ each; springers, 30¢; dressed hens, 1¢ to 2¢ each; springers, 30¢.

Fruits.—APPLES, old, 25¢ to 30¢ ½ pk., new, 20¢ to 25¢ ½ pk.; STRAWBERRIES, 25¢ bus. CHERRIES, sweet, 20¢ to 25¢ ½ bkt.; sour, 13¢ to 15¢ bus. RASPBERRIES, 18¢ to 20¢ ½ bkt. CURRANTS, 25¢ qt.

Vegetables.—POTATOES (old), 15¢ to 18¢ ½ pk.; (new) 20¢ to 25¢ ½ pk.; CABBAGE, 5¢ to 15¢ hd. CELERY, 10¢ to 20¢ stalk. LETTUCE, 5¢ to 15¢ hd. CARROTS, 8¢ to 10¢ bunch. BEETS, 5¢ to 8¢ bunch. ASPARAGUS, 10¢ to 12¢ bunch. CAULIFLOWER, 25¢ to 30¢ head. CUCUMBERS, 8¢ to 10¢ each. SPINACH, 15¢ ½ pk. BEANS, (stringless), 20¢ to 25¢ ½ pk.

LANCASTER

Butter.—Country butter, 45¢ to 50¢; creamery butter, 42¢ to 45¢.

Eggs.—Fresh, 26¢ to 28¢.

Dressed poultry.—Chickens, \$1.25 to \$2.50 each; springers, 65¢ to \$1.25 each; ducks, \$1.50 to \$2.50 each; squabs, 40¢ to 50¢ each.

Fruits.—APPLES, 20¢ to 30¢ ½ pk.; STRAWBERRIES, 25¢ to 30¢ per qt. box. RASPBERRIES, black, 20¢ to 25¢ qt.; red, 35¢ qt. CHERRIES, sour, 10¢ to 15¢ qt.; sweet, 15¢ to 25¢ qt. CURRANTS, 12¢ to 15¢ qt. BLACKBERRIES, 20¢ to 25¢ qt. PEACHES, 25¢ to 30¢ qt.

Vegetables.—A SPARAGUS, 10¢ to 15¢ per bunch. BEANS, (string), 20¢ to 25¢ ½ pk. BEANS, (lima), 35¢ to 40¢ pint box. BEETS, 8¢ to 10¢ bunch. CABBAGE, 10¢ to 20¢ bunch. CARROTS, 8¢ to 10¢ bunch. CALLIFLOWER, 15¢ to 35¢ head. CELERY, 10¢ to 20¢ bunch. CUCUMBERS, 8¢ to 10¢ each. ENDIVE, 5¢ to 10¢ bunch. LETTUCE, 10¢ to 20¢ head. ONIONS, 20¢ to 25¢ ½ pk. ONIONS (green), 5¢ to 8¢ beh. POTATOES (new), 25¢ to 30¢ ½ pk.; 25¢ to 30¢ ½ pk. POTATOES (sweet), 25¢ to 30¢ ½ pk. PEPPERS, 35¢ to 40¢ each. PARSLEY, 2¢ to 5¢ bunch. PEAS, 20¢ to 25¢ ½ pk.; sugar, 15¢ to 20¢ box. RADISHES, 5¢ to 8¢ bunch. RHIBARB, 5¢ to 10¢ bunch. SPINACH, 12¢ to 15¢ ½ pk. TOMATOES, 15¢ to 25¢ pint box. TURNIPS, 15¢ ½ pk. CORN, (sweet), 60¢ to 75¢ dozen. MUSHROOMS, 30¢ pt. bx.

New York

Butter.—Creamery, higher than extras, 33¢ to 34¢; firsts, 30¢ to 32¢; seconds, 28¢ to 30¢.

Eggs.—White, nearby, average extras, 28¢ to 30¢; extra firsts, 25¢ to 27¢; mediums, 25¢ to 28¢.

Poultry.—Live, by freight, fowls, 20¢ to 22¢; broilers, 22¢ to 28¢; old roosters, 15¢; turkeys, 15¢ to 20¢; ducks, 16¢; geese, 12¢.

Fruits.—CHERRIES, Jersey, qt., 40¢ to 50¢; STRAWBERRIES, Jersey, qt., 40¢ to 50¢.

Vegetables.—ASPARAGUS, Jersey, green, doz. bunches, 75¢ to \$2.75; BEETS, Jersey crates, 25¢ to 35¢; BEANS, Jersey flat bkt., \$1.25 to \$2; CABBAGE, Jersey, large bkt., 50¢ to \$1.25; CARROTS, Jersey bkt., 10¢ to 15¢; PEAS, Jersey bkt., 10¢ to 15¢; SPINACH, N. J. & Pa. bkt., 35¢ to 40¢; PARSLEY, N. J., ½ bkt., 50¢ to 75¢.

PITTSBURGH

Butter.—Nearby butts, 92 score extras and standard, 33¢ to 35¢; 88 score, 32¢; 88 score, 30¢. Print, 2¢ higher.

Eggs.—Nearby firsts, second-hand cases, 21¢ to 22¢; extra firsts, new cases, 23¢ to 24¢; nearby hennerly whites, 24¢ to 25¢; browns, 21¢ to 22¢.

Poultry.—Live hens, heavy, 19¢ to 20¢; medium, 22¢; Leghorns, 15¢ to 16¢; broilers, 26¢ to 32¢; Leghorns, 19¢ to 24¢; old roosters, 13¢; old geese, 10¢; spring geese, 22¢; ducks, 15¢ to 20¢; pigeons, 35¢ to 45¢ per pair; turkeys, 18¢ to 20¢.

CHICAGO CASH GRAIN

Chicago, Ill.—The following cash prices ruled here today: No. 2 yellow corn, 76¢ to 77¢; No. 2 white corn, 79¢ to 80¢; No. 2 mixed corn, 75¢ to 76¢; No. 2 white oats, 87¢ to 87½¢.

The Market Place

By W. R. WHITACRE

"DON'T look a gift horse in the mouth!"

When I was about twelve years old and had a consuming desire for a magic lantern, I read an advertisement which offered a wonderful machine with colored slides "free." My father recited this old adage and told me that you never get something for nothing, but it said free in the advertisement and a twelve-year-old boy is hard to convince.

I sent for the magic lantern, but instead I received a case of perfumed soap and all that I had to do was to sell it, return the money to the company and then they would send the magic lantern. I set out to sell soap and after pestering all the neighbors and relatives, my folks bought the balance. In time the long anticipated lantern arrived but it was a disappointment as it did not look like the one in the picture and did not work.

The lure of something free is strong in all of us and is the chief asset of the crook and swindler. The farmer who receives a letter from some commission man in a distant market promising prices far above the market ought to know better, in fact he does know better but again it is something free. I have read some of these letters and they run something like this: "We have special outlets for your poultry and guarantee to pay highest prices. Today we sold broilers at 55¢ a pound, why take less?"

Something for Nothing

The farmer knows that the market is only 40¢ on the best broilers and considerably less for others but the promise of 55¢ outweighs reason; it is 15¢ a pound "free." Some farmers are cautious enough to send a small shipment first, for which returns come promptly. They then gather together more stock and rush it off to the same dealer but this time a week passes and there are no returns. Another week goes by and then the farmer is uneasy and writes to the commission man but receives no answer. I believe there are a majority who realize they are fooled and make no further protest. But there are some who report the case to their farm paper or to the Department of Agriculture for investigation.

Last week a very similar case came to my attention. After investigating we found that this commission man had a very shady reputation, he was not even listed by the produce rating agencies, he had no telephone, he had no store but made arrangements to receive a few crates of poultry at other dealers' stores. He was not big enough to prosecute, as he rarely got more than a few coops a week and all indications were that he had little or no money. He is a parasite that injures the produce business and lives by promising something "free."

Friendly Talks

By Edgar L. Vincent

DOWN through the finest field of stone, some of which are almost too heavy for a strong man to lift, and others not more than a handbreadth across. I think that sometime in the long ago a stream of water must have deluged this valley, leaving in its wake these flat stones, fragments torn from larger layers of rock and deposited in this bed several rods wide.

I have no doubt that those who owned the farm before we came took their turn at clearing up these slivers of stone. Indeed, of this I found full evidence in the great piles of stone which lay along every fence on that

part of the farm, but there were plenty left for me. If I had as many dollars as I have spent days hauling stones from this field I never would need to farm it any more.

What Do We Leave Behind Us?

Do you not know men who are just like that river of bygone days that took its course down through our meadow? Such men leave little behind them but stones of stumbling and trouble for those who come after them. When they are gone, and it is the fate of us all to take our departure from this world sooner or later, we wonder what good thing they ever have done, but there is plenty of sorrow and heartache for those who try to clear away the wrong they have done.

Very forcibly this morning the question comes to me as I sit here at my work, "What will it be for me, when I come to life's sundown? Will the world be better or worse for my having lived in it?" It is my hope for us all that the record may be good and clear, so that sometime men may say, "They did their best to help humanity to a higher level."

Moon-Sign Planting

NOTICE one or two readers giving their views on moon-sign planting. I am not a "moon-sign" believer, as I believe and know from long experience that there is far more in planting in fertile soil, thorough preparation before planting, use of good seed, good cultivation, than there is in planting by the signs of the moon. If the above rules are closely observed and reasonable weather prevails, I guarantee I will make just as good a yield and quality crops (if not better) as those who plant by "moon-signs."

The rule ever since I could recollect is that all crops that mature out of the ground—wheat, oats, grasses, corn, watermelons, muskmelons, peas, etc.—should be planted on the increase of the moon, and all crops that mature in the ground, like potatoes, peanuts, onions, beets, turnips, should be planted on the decrease of the moon.

I never follow or let such signs bother me in planting. When my land is in proper order and the season or date right for planting, I plant regardless of what moon it is, and make just as good (if not better) crops as those who go by the moon. I have experimented or tested in my fifty-odd years' experience in farming with a good many crops and I am convinced that "moon-signs" are fakes or just old sayings.

The slogan should be in planting all crops, regardless of what moon it is: "Fertile land, good preparation, good seed, and good cultivation." If these rules are observed and reasonable weather prevails, good crops will be the result whether we plant on one time of the moon or the other.

W. H. Harrison.

The Case of Mike and Joe

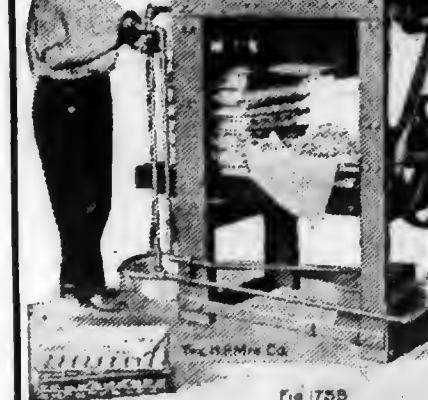
(Continued from page 5.)

demand will be here. We can go to unlimited markets in a truck and it is hard to go five miles in any direction in the whole valley without crossing a railroad. The supply will not decrease, so the best thing for agriculture is to help the other fellow to increase the demand by keeping more men working so they will consume more. But I will not go into that. I am not a tariff expert, simply a farmer, one a little hard-headed and stubborn, no doubt, and hard to sell on theories with so many facts staring me in the face.

Even with the industries all working in full there is still more produced than the domestic demand will absorb. So what is left for farmers but concentrated, intensive sales effort outside of the country?

Moant Gilead HYDRAULIC CIDER PRESSES

make your undergrade apples PROFITABLE



One grower cleared \$1,400 in less than two months, averaging 4 gallons of cider per bushel

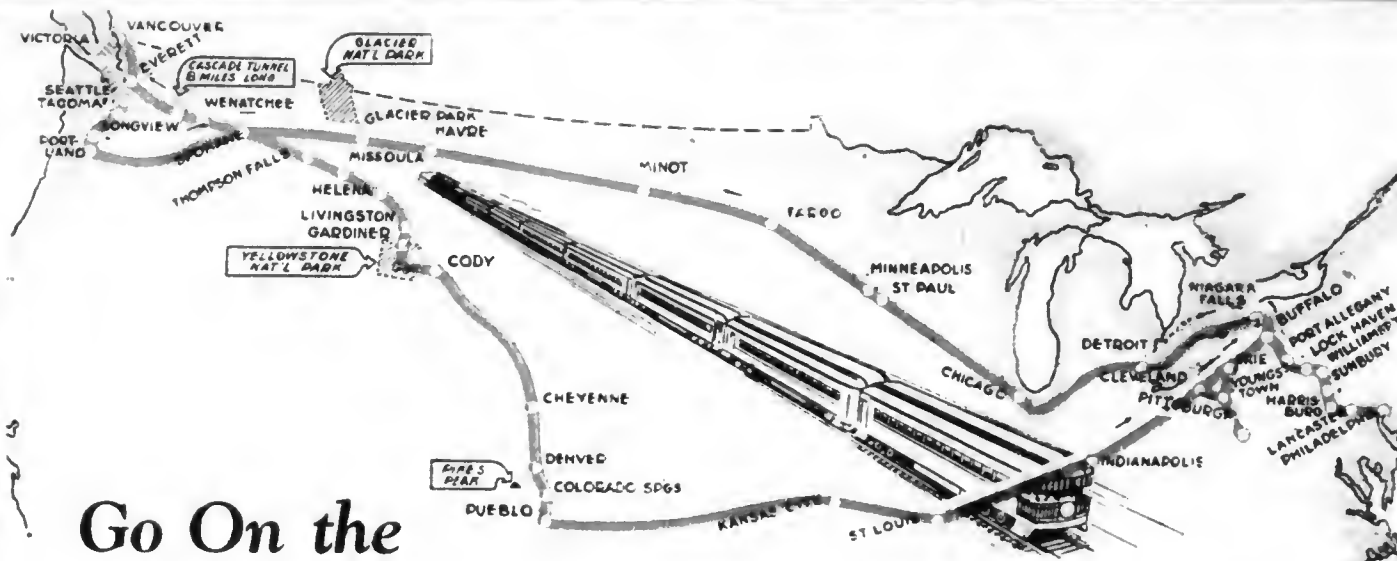
SEE The Northwest This Year at Low Cost

ITINERARY

Lv. Philadelphia	P.R.R.	8:40 A.M.	July 26
Ar. Harrisburg	P.R.R.	11:37 A.M.	July 26
Ar. Buffalo	P.R.R.	7:45 P.M.	July 26
Lv. Pittsburgh	P.R.R.	10:00 A.M.	July 27
Ar. Buffalo	N.Y.Cen.	4:05 P.M.	July 27
Lv. Buffalo	M.Cen.	9:00 P.M.	July 27
Ar. Niagara Falls	M.Cen.	9:00 P.M.	July 27
Lv. Niagara Falls	M.Cen.	10:00 P.M.	July 27
Ar. Chicago	C.B.&O.	11:30 A.M.	July 27
Lv. Chicago	C.B.&O.	10:30 P.M.	July 27
Ar. St. Paul	G.Nor.	10:45 P.M.	July 27
Lv. St. Paul	G.Nor.	1:30 P.M.	July 28
Ar. Minn.	G.Nor.	2:30 P.M.	July 28
Lv. Minn.	G.Nor.	2:30 P.M.	July 28
Ar. Glacier Park	G.Nor.	2:30 P.M.	July 28
Lv. Glacier Park	G.Nor.	2:30 P.M.	July 28
Ar. Spokane	G.Nor.	2:30 P.M.	July 28
Lv. Spokane	G.Nor.	2:30 P.M.	July 28
Ar. Wenatchee	G.Nor.	2:30 P.M.	July 28
Lv. Wenatchee	G.Nor.	2:30 P.M.	July 28
Ar. Vancouver, B.C.	C.P.S.S.	10:30 P.M.	July 31
Lv. Vancouver, B.C.	C.P.S.S.	2:30 P.M.	July 31
Ar. Victoria, B.C.	C.P.S.S.	2:30 P.M.	July 31
Lv. Victoria, B.C.	C.P.S.S.	2:30 P.M.	July 31
Ar. Seattle	C.P.S.S.	8:30 P.M.	July 31
Lv. Seattle	G.Nor.	11:00 P.M.	Aug. 1
Ar. Longview	G.Nor.	4:30 A.M.	Aug. 2
Lv. Longview	G.Nor.	10:00 A.M.	Aug. 2
Ar. Portland	G.Nor.	11:30 A.M.	Aug. 2
Lv. Portland	S.P.&S.	10:30 P.M.	Aug. 2
Ar. Spokane	S.P.&S.	8:30 A.M.	Aug. 3
Lv. Spokane	N.Pac.	12:30 P.M.	Aug. 3
Ar. Gardiner	N.Pac.	7:00 A.M.	Aug. 4
Lv. Philadelphia	P.R.R.	7:45 P.M.	Aug. 10

(THREE DAYS IN YELLOWSTONE PARK)

Lv. Cody	C.B.&O.	8:00 A.M.	Aug. 7
Ar. Denver	C.B.&O.	8:00 A.M.	Aug. 8
Lv. Denver	M.Pac.	1:30 P.M.	Aug. 8
Ar. Colorado Springs	M.Pac.	4:00 P.M.	Aug. 8
Lv. Pueblo	M.Pac.	5:10 P.M.	Aug. 8
Ar. Kansas City	M.Pac.	8:30 A.M.	Aug. 9
Lv. Kansas City	M.Pac.	8:30 A.M.	Aug. 9
Ar. St. Louis	B.Four	3:58 P.M.	Aug. 9
Lv. St. Louis	P.A.L.E.	6:00 A.M.	Aug. 10
Ar. Harrisburg	P.R.R.	5:10 P.M.	Aug. 10
Lv. Philadelphia	P.R.R.	7:45 P.M.	Aug. 10



Go On the

PENNSYLVANIA FARMER Tour

PICTURE a place where Nature has done one of her most lavish pieces of handwork, and where man has created the world's finest resorts—that's the Pacific Northwest, Glacier and Yellowstone Parks and the Colorado Rockies and it's calling you and your family. Go this year! The Pennsylvania Farmer has arranged unusually low all expense rates with five of America's great railroads for this glorious sight-seeing and educational tour.

Nothing like this marvelous trip has ever been conducted at such low cost. The one low rate includes everything—meals, berths, sight-seeing auto trips. Only one ticket to buy—no tips to pay—not a single travel nor hotel worry.

This wonderful tour takes you through the enchanting Glacier National Park, the Pacific Northwest, the Yellowstone National Park and on to the Colorado Rockies. You'll visit the bustling cities of the Northwest, its wonderful farming and dairy territory, primeval forests, Indian Reservations, beautiful foreign cities of Vancouver and Victoria in British Columbia. You'll thrill to the awe-inspiring trip on the Pacific Ocean on the large Canadian Pacific Steamer, and all the West and its famous scenic beauty!

Your friends and neighbors are going. So you'll be with jolly, congenial folks just like yourself. And the date is when you can best get away—July 26 to August 10.

Nothing To Do But Have a Good Time

The tour will be in charge of the Tour Director of the Pennsylvania Farmer and experienced railroad representatives who serve as escorts and business managers, relieving you of all travel details and smoothing the way to a care-free vacation. Mere words cannot tell you of the real wonderment of this tour. You must go!

Send for FREE Booklet

This booklet gives you the day by day travel description of the entire tour—pictures many of the scenic wonders you see on the trip, shows a map of the route, gives you every bit of information you want to know.

Never has such a tour been offered at such a low cost. You owe yourself and family a vacation.

MAIL THE COUPON BELOW NOW!

MAIL NOW

DIRECTOR OF TOURS,
Pennsylvania Farmer,
7301 Penn Ave.,
Pittsburgh, Penna.

Please mail me free booklet on your tour to the Pacific Northwest.

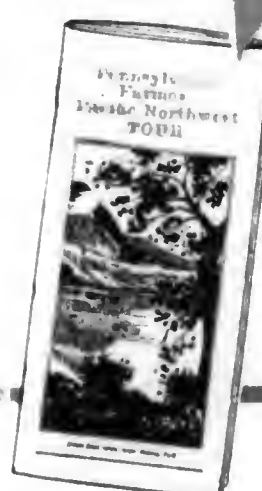
Name.....

Address..... R. F. D..... State.....

ON THESE GREAT RAILROADS

The New York
Central Lines
Great Northern Ry.
Missouri Pacific
R. R.
Northern Pacific
Burlington

These great railroads are putting all their well known facilities for comfortable and pleasant travel at your service. They will help make your trip a wonderful success.

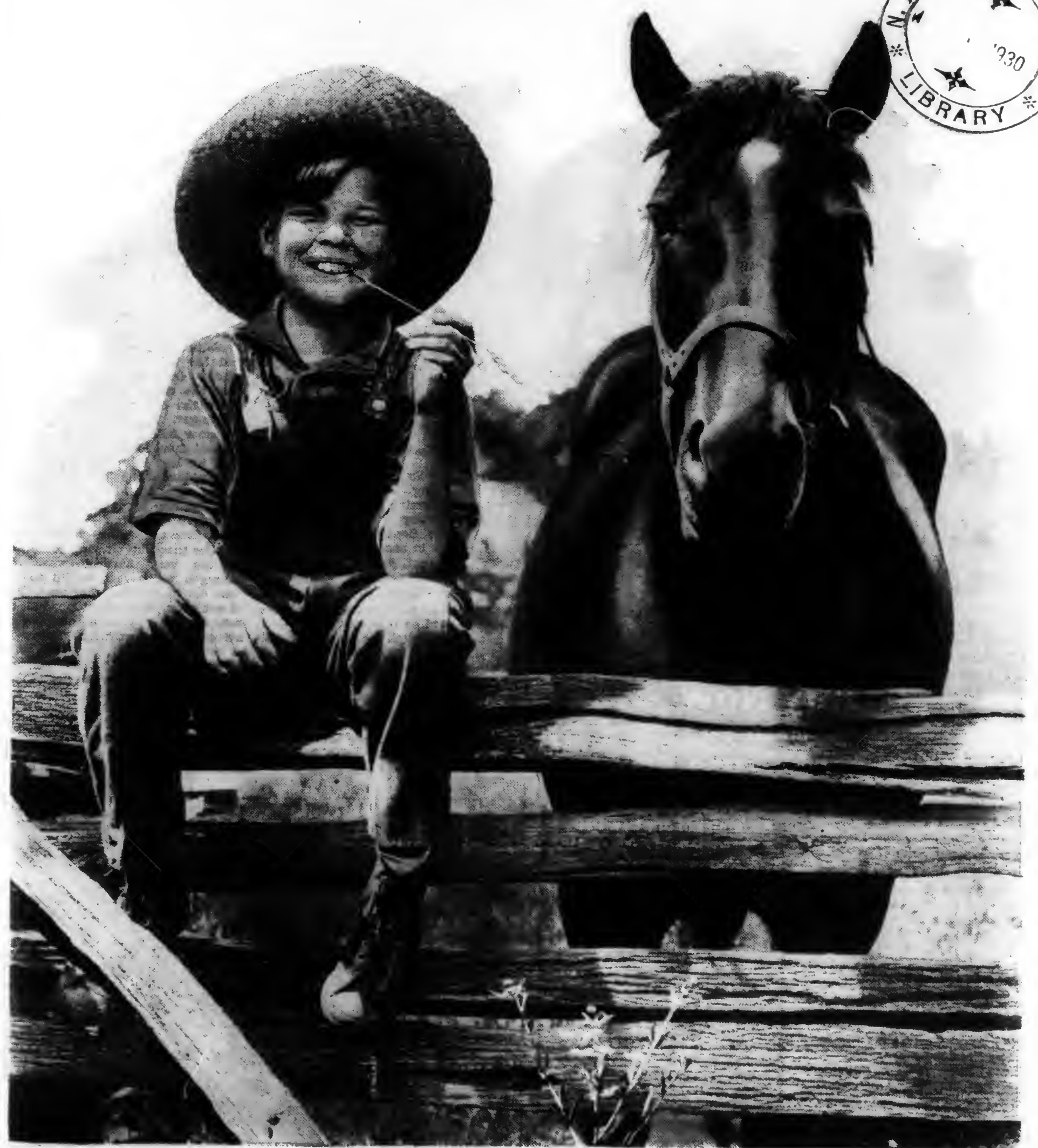


PENNSYLVANIA FARMER

Published Weekly

Established 1877

July 12, 1930



Philadelphia

Pittsburgh

Harrisburg

12 or 21 bushels of Winter Wheat per acre?

THE next time you hear a neighbor say he can't make money raising wheat, tell him what 8141 farmers in 13 winter wheat states say in answer to a recent questioning. Their estimate of production without fertilizer runs from 9 to 16.8 bushels per acre. With fertilizer 16.3 to 25.8 bushels. The average was 12.3 bushels per acre without fertilizer against 21.4 bushels with.

This year more than ever it is necessary to get big yields of high-quality wheat to make a profit. And the sure way is with a high-quality plant food. . . . Armour's Big Crop High Analysis Fertilizer.

Big Crop gives wheat a good start before frost and helps it stand the winter. Big Crop helps wheat stand out with the first spring rains and develops long heads chuck-full of plump grain by the time harvest season rolls around. . . . grain that grades high and brings the top price. A liberal application of Armour's Big Crop Fertilizer will increase your production per acre.

Another thing about Big

Crop that will interest you, it is never caked or lumpy. It always drills perfectly to the last ounce. An Armour dealer will help you figure how much Big Crop you will need this fall.



Armour Fertilizer Works Chicago, U.S.A.

**\$20 More
Income from
every acre of corn**

OHIO Experiment Station
tests on yearling steers show that an acre of good corn silage earns \$20 more than an acre of corn fed as grain and stover. Likewise the Illinois Station found that corn silage, properly made, produces an extra earning of from \$12 to \$6 per acre.
A Papec Ensilage Cutter will do it for you! It produces silage in a clean, moist, palatable form, and costs down to each bottom. Experiment station tests show that Papec requires less power per ton. Papec saves a man at the

PAPEC
Ensilage Cutters



SAVE AND BUY

Quick Acting

Fine as Flour

Low Cost

ALBA MARL

Nature's Soil Remedy

All Available

Granulated For

Easy Sowing

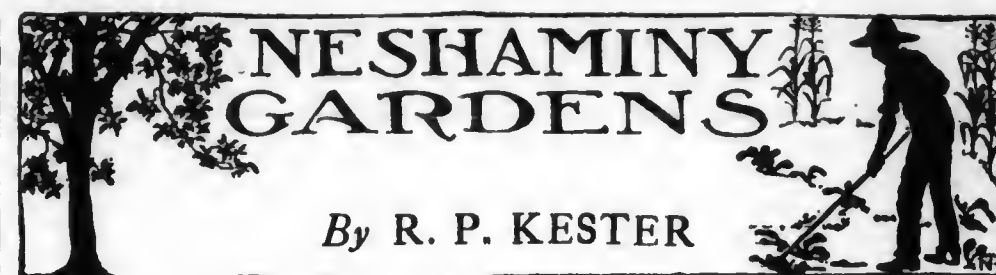
WRITE FOR GUARANTEED DELIVERED PRICES TO . . .
ALBA MARL LIME COMPANY, CHARLESTOWN, W. VA.

"MARUOG'S SPECIAL"
IMPORTED "Dangle-edge" GERMAN SCYTHES. Hold a keen edge and move as smoothly as a lawn mower. Write for descriptive catalogue. To buy The MARUOG CO., Dept. P, Tracy City, Tenn.

POTATO DIGGERS

The "Success Junior" for the small grower and the Elevator Digger for the larger producer. Both dig labor-savers and money makers. Let us help you make money from your potato crop this year. **A. B. Farquhar Co., Limited, Box 146, York, Pa.**

THE ADVERTISEMENTS in Pennsylvania Farmer contain information that is valuable and important. Read them and when answering them mention Pennsylvania Farmer. It will help us and help you.



I BEGAN last week to try to portray the change that has taken place in agriculture and rural thought and custom during the past fifty years. All who lived in the country a half century ago, and who remember how country people thought and lived, know how great the change has been. At that time there was a real class consciousness. Farmers felt that they were different, and also believed that the difference was in their favor, at least as far as morals were concerned.

But the class feeling was equally strong in city people. Even those who lived in towns and villages looked with a degree of tolerance if not of contempt upon the rural dwellers. Writers, lecturers and cartoonists referred to farm people as "rubes," "hicks," and "hayseeds." Both sides accentuated the differences because both realized that there was at least a superficial difference. The farmer and his family could be picked out in a mixed crowd because of the difference in dress, complexion and deportment. The farm woman shunned her city cousins because she knew instinctively that her dress and millinery were less stylish, and the farmer often stood silent and abashed before the better dressed and more fluent town man.

Loyal to Each Other

Rural people were then more clanish than they are today. However much they might have wished they could be something else, they felt and acted a certain degree of loyalty to their community and their calling. This, no doubt, arose from the fact that not only their business but their entire social life was bound up indissolubly with the country. They thought together, talked together, met together and worked together. This lack of association with town and city people led inevitably to the formation of clanish thoughts and acts.

The difference in dress and personal appearance was caused, not entirely by a lack of desire nor a lack of cultural instinct, but because of the absolute lack of money with which to acquire the better things of life. The chief business of the farmer a half-century ago was to produce from the farm the greatest possible proportion of the family's living. Crops were planted with that end in view, stock was kept which would furnish a variety of meat and other products, and even the home was partially a manufacturing plant for converting the products of the farm into a living for the family.

Tax Horror Still Persists

On few farms was the making of money the primary purpose of the work carried on there. Of course, a few things must be bought—salt, pepper, sugar, spices, etc., and of course, clothing material, although even this necessity was produced on the farm a few generations earlier. Two other greedy and inexorable demanders for cash were the money-lender and the tax gatherer. My present dislike of these things is due to the horror inspired when a child. So often did I hear the reference made to interest and taxes, and so thoroughly was I impressed with fear which the approach of collecting time inspired in my parents' breasts, that I have it to this day.

Most farmers in central Pennsylvania half a century ago did something else than farm part of the time in order to get the money necessary to pay the cash expenses. Of the few sidelines of business available, lumbering was by far the leading one.

That section of the state was covered with fine timber, mostly pine and hemlock, although hardwoods were found in some sections. The bark of the hemlock was used by tanneries in the tanning of leather, and thousands of tons were annually peeled, and hauled to market. The trees were cut into logs and these hauled to the mills, or to the creeks and rivers to be floated to lumber mills farther down the streams.

Gloried in Their Strength

The hard places in the life of those pioneering people could have been made smoother if the owners of the land had received something for the lumber which furnished them work. But at that time the forests furnished them work only, and for that they received wages which would be scorned by the wage worker of today. But such work was the salvation of the farmers of that time. It enabled them to pay what must be paid for in cash.

But I do not remember that father and mother complained about the long hours, the hard work nor the meager returns. They accepted life as they found it, possibly because they knew it was the common life of all who lived in the country. I think the people of that time rather gloried in the fact that they could successfully cope with so rigorous a life, and looked with more or less contempt upon the people of other callings, thinking them "soft" if not lazy.

No Time for Play

Farmers did not have many play times fifty years ago. Work days were fourteen to sixteen hours long, and weeks had at least six and one-half work days in them. Farm women may not have been more tired at the end of a day or week than they are today, but they were compelled to do more manual labor. On most farms they did all the milking, the raising and tending of the poultry, and the garden making. The boys and girls had their part to do and they did it for various reasons.

But to stop this article here would be to leave an impression with the younger generation that the people of that day had no fun. That is far from true. Possibly because opportunities for a good time came less often to the people, they enjoyed them more keenly when they did come. Family visiting was then in vogue. The whole family would pile into a wagon, or a sled in winter, and go whenever and wherever the inclination led. Notices and invitations were not necessary. If the intended "victims" were found to be away, the visitors drove on to another place. But a welcome was sure to follow. Every good housewife was always prepared for a Sunday dinner. Only the occurrence of a calamity prevented a "fore-handed" farm wife from being ready to entertain unexpected visitors. And such a time as they all would have! Talk about fun! It is not a discovery of the 20th century.

Apple Pomace for Fertilizer

We have moved to a place where there are tons of apple pomace from an old cider mill. Would like to know if it is any good for fertilizer for a vegetable garden such as perennials, carrots, potatoes, etc. Also, how much to the acre should be put on, if any? J. W. Boyard.

I REGRET that I have not been able to secure dependable information on the value of apple pomace for fertilizing vegetables. My guess would be that it might pay to go easy and make a test on a few plants the first year. Possibly some reader may volunteer a report of experiences in this connection. G. S. W.

More Readers on Farms in Pennsylvania than Any Other Farm Paper

PENNSYLVANIA FARMER
Published Weekly
Consolidated with
PENNSYLVANIA STOCKMAN and FARMER
Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of Mar. 3, 1879.
PUBLISHED EVERY SATURDAY BY

President Arthur Capper
Vice-President T. D. Harman
Vice-President Geo. M. Slocum
Editor-in-Chief E. S. Bayard
Manager Neff Laing

New York 420 Lexington Ave.
Chicago 203 No. Wabash Ave.
Detroit 1632 W. Lafayette Blvd.
Philadelphia 1201 Chestnut St.
Cleveland 1011 Rockwell Ave.

CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., July 12, 1930

No. 2



Scenes like this are hard for the fisherman to pass by without trying his luck.

Farm Editors in Canada

By M. C. GILPIN

FARM paper editors are queer ducks. At least that is the opinion of some readers, while others are less complimentary and more emphatic in their opinions. But with all their failings these so-called editors have certain human qualities which make them acceptable in polite society, when properly chaperoned. Having associated daily for two weeks with editors from most of the farm papers in this country we have concluded that their queerness is more apparent than real, that they possess fair intelligence, excellent digestions and rare judgment, especially in the choice of wives.

This weighty opinion is part of a load of ideas, impressions and information acquired on a tour of eastern Canada with the American Agricultural Editors' Association as guests of the Canadian government and Canadian railways.

Leaving Windsor, Canada, which is across the river from Detroit, on June 12th, we traveled north several hundred miles, then east to the Atlantic coast and back along the St. Lawrence river and Great Lakes to Windsor, completing a triangle of some 4,500 miles. For fourteen days we saw a constantly changing panorama of great scenic beauty, a land of unexpected natural resources, inhabited by a courageous, progressive, capable and friendly people.

We learned that many of our preconceived ideas of our northern neighbor were far from the truth. Eastern Canada is not a small strip of backwoods territory shivering on the edge of the Arctic Circle, but an immense region of agricultural, forest, mineral and power resources, both developed and in the pioneer stage. The climate in June compares with that of Pennsylvania. Grasses, shrubs and flowers that thrive here flourish there and many of the same crops are grown as in our state. The winters are long and cold, but when spring opens vegetation grows very fast. We saw grass six inches high where snow had lain two weeks before.

In southern Ontario, which is across Lake Erie from Ohio, is a rich and well-developed agriculture. The soil and climate are similar to that of our mid-west Corn Belt, and formerly corn and hogs were the main source of farm income. Here is where the corn borer got its foothold this side of the Atlantic, and did so with such enthusiasm that corn growing has gone out of fashion. A few years ago it became plain that other crops must be found to take the place of corn. Tomatoes, beans and tobacco were tried and the borer starved out to a certain extent. Then considerable corn was planted again, but though tough borers gathered the starvation method to dampen the corn growers' hopes. Corn is now grown in a system of clean culture, but the borer remains a strong competitor for the best. This is a fertile region, suitable to a variety of crops, and will doubtless continue to be a prosperous farm section in spite of the borer.

Some idea of the farming area and conditions in Ontario is found in the fact that the province produces a half billion dollars worth of farm products a year. Dairying plays a prominent part; the annual production of the dairy industry is valued at \$100,000,000. Much of the cheese that goes to the British market comes from Ontario factories, and the dairy breeding stock is well and favorably known in this country. Fruit growing is successfully practiced, as is tobacco raising, in the southwestern part of the province.

At Guelph we visited one of the pioneer experiment stations on this continent. If readers notice a repetition of the expression "on this continent" they can attribute it to the Canadian influence, for the people in the Dominion use it as a handy means of comparison when in their modesty they refrain from saying "in the whole world" as taking in too much territory for credulity. Canadians are like Americans in many things, one of which is in pride of their country and its institutions, and as with us that pride seems justified.

The Ontario Agriculture College was established at Guelph in 1874 with 28 students. Now it has 28 large, substantial and well-equipped buildings—nearly one apiece for the first students—a farm of over 700 acres of high-class land and some 200 head of livestock. The campus is extensive and beautifully landscaped as are all of the agricultural colleges and experiment stations we visited. One thing that strikes the visitor throughout Canada is

that the buildings are made for permanence, as if the people expected to stay a while.

North of Guelph is a lake region, a great hunting and fishing country. Every time we passed one of the inviting bodies of water John Case, famous Missouri editor and novelist, with a wild look in his eye, had to restrain himself from jumping off the train and hitting the trail of a wilder trout or bass, and many others sympathized with him. Mile after mile of wooded hill, dashing stream and sparkling lake unwound in a reel of breath-taking beauty, dominated by graceful spires of Canada's blue spruce and blessed by a total absence of signboards. A country to delight the heart of the nature lover and to impress even the most prosaic.

North of the sportsmen's paradise we strike a mining region. Not coal or iron mines, but silver and gold, nickel and cobalt. Here the people instead of deploring the low price of hogs or milk are distressed at the low price of silver, which is now around 26c an ounce, compared with 40c in better days. However, cobalt, a by-product of silver, is of more commercial importance, since it is now combined with steel to make an especially hard material useful for sharp-edged tools.

We stopped at Cobalt, a mining town, and went through a silver mine. The metal is found in vertical veins or cracks in the rock, not horizontally like coal. So silver mining is a very much up and down proposition. We look straight down a dizzy distance and see a miner drilling a hole for dynamite which blasts off a chunk of rock.

The silver usually occurs in small particles mixed in the rock. Occasionally it is found in pure lumps or sheets weighing several pounds. The rock is ground and put through a process which separates it from impurities. The silver is then melted and poured into molds. The pigs of metal resulting are about four inches square by twice as long and weigh some 80 pounds apiece. Such an ingot is worth about \$200. None of our party tried to sneak any of them away in their pockets.

The mines in this section have yielded over a billion dollars worth of metal. About 85 per cent of the world's nickel comes from this locality, which is also the world's chief source of cobalt and source of the largest production of gold on the continent.

Not much can be said for the appearance of the mining country. One especially ugly-looking place partly filled with grey slime was once a lake which was drained to get the metal found in its banks. This was Lake Cobalt where the first silver was discovered in this section.

One story of the discovery is to the effect that on a Sunday afternoon in 1903 a couple of railway contractors were killing time by throwing small white pebbles into the water. They noticed that the pebbles were silver and thus the secret was out. The other tale states that an engineer in a spirit of recklessness (Continued on page 20.)



The Prince's Gate, Exhibition Fair, Toronto, Canada. The Toronto Fair is one of the leading farm shows on this continent.

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN AND FARMER

Published Every Saturday by
CAPPER-HARMAN-SLOCUM, INC.
7301 Penn. Ave., Pittsburgh, Pa.

President: Arthur Ganner
Vice-President: T. D. Harman, Geo. M. Slocum
Manager: Neil Latine

Editorial Staff
Editor-in-Chief: E. S. Harman
Editors: C. L. White, M. C. O'Brien
Field Editors: Miles Horst, G. W. Harris

Editorial Offices: Harrisburg
Pittsburgh: Harrisburg
Pittsburgh: Harrisburg

Contributing Editors
R. A. Kaefer, J. H. Lippman
A. J. Kaefer, J. H. Lippman
J. H. Lippman, J. H. Lippman
J. H. Lippman, J. H. Lippman

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Canadian Subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per line (10 words) for first insertion. Minimum space 5 lines. Special rates on application for long-term and classified advertising. No deceptive, immoral or fraudulent advertising accepted at any price.

Member Agricultural Publishers' Association,
Audit Bureau of Circulations.

Volume 33, No. 2
Established 1877

DR. WILEY

DR. HARVEY W. WILEY, scientist and pure food specialist, died at Washington, D. C., on June 30th, aged 86 years. Nearly a half century ago Dr. Wiley, then chief chemist in the Department of Agriculture, began his crusade against adulterated foods. So well did he succeed that the idea of pure food has been written in the laws of the land and etched on the minds of its people.

LOW PRICE OF MEAT

The present low price of livestock will increase the consumption of meat and ultimately benefit both producer and consumer is the optimistic opinion of Charles D. Carey, chairman of the National Live-stock and Meat Board. It is true that our meat consumption could be increased, as could our consumption of many food products, without hurting anybody, and it is to be hoped that the live-stock and meat industry will embrace this opportunity of informing the public concerning the economy of meat in the diet. Consumers quickly learn about the extravagance of meat when the price is high. It is only fair that they be likewise informed when it is low.

ACREAGE REDUCTION

We may expect to hear considerable about acreage reduction during the remainder of this year. Meetings are scheduled in the West at which speakers will explain to farmers how they cannot hope to control prices without controlling supply. The Department of Agriculture in its wheat outlook warns farmers that prices may be relatively low for the next six to ten years and suggests acreage "adjustments" to meet the situation. How far individual farmers will follow this advice is uncertain, but no hearty response is yet reported, while some strong opposition is noted. Right or wrong, the very human attitude of letting the other fellow do the reducing seems to prevail and it will take much eloquence to change it.

OUR MARKETING SYSTEM

Our wasteful marketing system is the theme of much denunciatory discussion. It is blamed for most of our ills when we run out of other handy objects or institutions to blame. But so far all the critics and reformers have been unable to improve it. In a free country where equal opportunity is extended to all it would seem that some enter-

prising genius imbued with the sordid motive of personal gain would bring forth a perfect system, save the nation and be well paid for it. Most of the plans to improve the system confine themselves to an airing of its defects, but are noticeably shy of more economical means of rendering the same service. Possibly we have evolved a pretty efficient marketing system after all.

FROM LIFE

WHEN President Roosevelt's Country Life Commission was under discussion a certain young man got a great deal of publicity and was supposed to be an authority on the subject. His employers, however, were willing to part with him, so a better place was found for him in a department of the government that has been a convenient unloading chute for many years. The officials of this department did not cling to him tenaciously after he had been there awhile, releasing him to a place in a certain state institution at a better salary. After some months there the authorities of that institution were convinced that they should share their experience with a distant institution, so he was again promoted to a still better position. Now he is enjoying a goodly title in another official agency, but we don't know who was responsible for this last transfer. Such are the uses of publicity in starting a man; and such was the value of incompetence in advancing this one.

COMPULSORY POOL

A COMPULSORY wheat pool in the prairie provinces of western Canada is proposed as a remedy for the rather unsatisfactory situation in which wheat farmers find themselves. For the non-poolers profited by staying out of the pool, selling their crop at \$1.30 to \$1.50 a bushel last fall, while the pool advanced a dollar a bushel to members and has made no further payment. Nor is it likely to in view of the present market level. How a compulsory pool can make headway in this situation may be puzzling, but the cooperationists are vigorously agitating it in spite of the fact that considerable bootlegging of wheat is now reported. That the ancient economic laws have not been suspended by the Canadian pool is becoming evident. The idea of control, which is the real aim of the compulsory pool advocates, is but a dream as long as other parts of the world can and will raise wheat.

LABELED STEAKS

The lengths to which the public will go in demanding standardized food products apparently has no limit. The sugar scoop and the cracker barrel have disappeared from grocery stores. Everything from fresh asparagus to clipped beef and sliced bacon is sold in fancy packages under a highly colored label. But the end is not yet. In 1927 the federal government inaugurated a system of beef grading and labeling. Roller stamp-mark the official grade label on each cut. The plan has been popular. Demands of the meat industry and large beef buyers have led to an extension of the system. Beginning this month official graders will be stationed at slaughtering establishments in Erie, Buffalo, Cleveland, Detroit and St. Louis. Others now at work in Philadelphia, New York and most other large eastern cities are busy stamping steaks and roasts as U. S. Prime, U. S. Choice, U. S. Good or U. S. Medium. These days the city man needs only to know how to read to be a discriminating buyer.

NOT A FAD

A READER suggests that to increase the consumption of milk we discard inspection, pasteurization, etc., and sell the

product the old-fashioned way "out of a can with a dipper at 10c a quart, paying the farmer 5c a quart." Modern milk sanitation is not something thought up by faddists looking for trouble, but the result of experience which has shown the necessity of such care under modern conditions. Anything which might lessen the consumer's confidence in the wholesomeness of milk would decrease rather than increase consumption. Few foodstuffs are delivered to the consumer as quickly and cleanly and with as little lost motion as milk, says O. E. Reed, chief of the Federal Bureau of Dairy Industry. The best insurance of a broad outlet for dairy products lies in maintaining a high standard of quality for these products.

MORE COSTLY THAN QUAKE

A SOUTHERN congressman, speaking in favor of the reservoir system of flood control in the Mississippi valley, cites the danger of earthquakes as an argument in favor of his plan. He quotes eminent geologists on the instability of the earth's crust caused by the deposit of river-borne soil from half the United States at the mouth of the Father of Waters. By his plan, land-carrying floods would be checked by storing excess water in the soil and in reservoirs along the Mississippi's tributaries.

Man's efforts may do little to stay the gradual wearing down of the earth's land masses, a recognized cause of earthquakes. But this congressman's speech is interesting because it emphasizes the extent of soil erosion. Every bare field loses a layer of its best soil with every rainstorm. The effect of that loss geologically is small and remote; the economic loss to the land owner is immediate and very much greater than commonly supposed. We are constantly impressed by the wide-spread use of soil-holding and soil-building cover crops among prosperous farmers. Some practical suggestions on the subject appear elsewhere in this issue.

SPECIAL TRAIN ASSURED

UNUSUAL activity of geysers in Yellowstone Park, coincident with the official opening of the season, is reported by the National Park Service of the Department of the Interior. "As though aware that the Yellowstone National Park season has begun and striving to do their very best for the edification and entertainment of park guests, geysers in the various basins are alive with action."

We are glad for this assurance that the geysers are on the job ready to perform for the Pennsylvania farmers and their friends who will start July 26th on the Pacific Northwest Tour being sponsored and conducted by this paper. All along the line every one concerned with the tour seems similarly alert.

We have been asked about the present status of the tour. Here are the facts:

More than enough reservations have been received to assure us of movement by special train.

Going by special train, we shall have more time at some of the points of interest than is shown on the published schedule.

Several new but unadvertised features have been included in our plans to add to the pleasure and comfort of those who make the trip.

Sixteen members of our last winter's Florida-Cuba Tour have made reservations for this summer expedition.

We shall try to add enough cars to our special train to take care of late comers.

Requests for reservations should reach us by July 15th. We hope to accommodate those coming later, but cannot promise.

The essential details about this unique, low-cost, care-free vacation trip appear on the opposite page.

New Jersey Farm Comment

By G. W. HARRIS

Still Room for More Facts about the Pennsylvania Farmer Pacific Northwest Tour, July 26 to August 10

IT is just a friendly sort of tour for farmers and their friends.

It goes to places all of us have wanted all our lives to see.

If you join us you will spend three days in strange Yellowstone; you will ride for hours on a Pacific steamship; you will pose with Indians in Glacier Park; you will cross the Great Plains, the Wheat Belt, the Corn Belt, the Cow Country, the Rocky Mountains; you will see Niagara Falls and the West's important cities.

You will travel by special all-Pullman train, with comfortable automobiles and motor buses for the numerous side trips. You will have meals you will never forget. You will make new lifetime friends.

No worry—Meals will be ready, automobiles waiting, wherever you go. You are relieved of every detail.

No bills to pay.—Every necessary expense is included in the advance payment. You can have a good time without your pocketbook.

No tipping.—Someone else will attend to that.

Details, costs and schedules appeared in recent issues. If you missed them or have other questions, write immediately. All reservations must be made within the next few days. We anticipate a wonderful trip and want all who can to enjoy it with us.

Address Tour Manager, Pennsylvania Farmer, 7301 Penn. Avenue, Pittsburgh, Pa.

and keenest observations concerned the types of grading machines used on the many farms visited and the efficiency with which the Delaware and Maryland growers were producing clean fruit. The visitors were quick to observe those orchards where inefficient spray methods had resulted in damage to the fruit crop. We wager that most of them on returning home inspected their own orchards with the hope that they were doing a better or as good a job of producing clean fruit as their competitors.

SOUTHEASTERN Pennsylvania potato growers meet at the National Farm school near Doylestown, July 29 and 30, for two field days. This is being sponsored by the Bucks County Potato Growers' Association and may attract many interested New Jersey growers. It is well to know what your neighbors are doing along production lines.

Demonstrations of potato machinery, lime slaking and cultural practices will be held in the 25-acre field of Russets at the Farm School.

Those who have never visited the National Farm School and are not acquainted with its purpose and operation might well take this opportunity to learn. The National Farm School is a school operated for those boys who are not financially able to attend college and who wish to learn to farm. All of the work on this large farm is conducted by the students, and while they are receiving theoretical training they also are doing the practical work.

NEW JERSEY poultrymen will spend three days visiting Pennsylvania poultry farms beginning August 4. This tour by motor bus is being sponsored by the New Jersey State Poultry Association.

At present the plans, as outlined by L. M. Black, secretary of the association, are to visit near York the farm of Guy Leader, Master Farmer of 1929, Paul Guldin's at Reading, where a number of old farm buildings have been remodeled for poultry; and the Taylor Brothers' White Leghorn plant at Newton.

During the trip a visit will be made to the Gettysburg battlefield. On the return a stop will be made at the Cane Poultry Farm at Rosemont, N. J.

NEW JERSEY is making extensive plans to have a large delegation attend the American Farm Bureau annual meeting which will be held in Boston this December. The fact that this meeting is being held in the East this year will afford many New Jersey farmers the opportunity to attend this gathering for the first time.

DO not forget the annual state picnic of the Farm Bureau and Grange at Atlantic Highlands in Monmouth county next week, July 17. Samuel H. Thompson, President of the American Farm Bureau, and Hon. L. J. Taber, Master of the National Grange, will speak to this group.

THE New Jersey Extension Service says that 3,177 New Jersey farmers this year modified their production plans to conform to recommendations of the state agricultural outlook report of 1930. This report was prepared by W. F. Knowles, extension service economist, and the U. S. Bureau of Agricultural Economics.

No report is given as to what practices and plans were changed, but possibly at the end of 1930 we may be able to learn just what losses these 3,177 farmers might have suffered had they followed their original production plans.

NEW JERSEY birds will compete against flocks from all over the world when exhibited at the Fourth World's Poultry Congress at London from July 22 to 30. Sixteen leading poultrymen in the state shipped their birds last Saturday from New York on the S. S. Minnewaska enroute to London. Accompanying the shipment of 300 American fowls is Professor Willard C. Thompson, chairman of the exhibit committee, and M. L. Chapman of Robbinsville, N. J., vice-chairman.

The New Jersey entries by breeds are: Barred Plymouth Rocks—Brielle Poultry Farm, Brielle; Newton Cosh, Vineland, and Kerr Chickeries, Frenchtown. White Plymouth Rocks—Hayward B. Spangler, Matawan. Buff Plymouth Rocks—Harry N. Conner, Stockton. White Wyandottes—Charles D. Cleveland, Eatontown. Columbian Wyandottes—Louis D. Schaible, Shiloh. Jersey Black Giants—Marcy Farm, U. L. Meloney, Matawan. and William E. Roch, Columbus.

Jersey White Giants—Marcy Farm, U. L. Meloney, Matawan. S. C. White Leghorns—Demore Poultry Farm, Sewell; and Vreeland, Frenchtown. Little Falls. American Dominiques—Farm Mount Farms, Eatontown. S. C. Rhode Island Reds—J. Clifton Lambert, Jr., Scudder Falls, and Kerr Chickeries, Frenchtown. S. C. Black Minorcas—Coventry Farm, R. L. Benson, Princeton. Buttercups—Charles E. Hall, Egg Harbor City. White Orpingtons—Jill Farm, J. I. Lyle, Plainfield.

W. F. KNOWLES reports that in New Jersey the peach crop is spotted, especially in the heavy peach producing sections of Burlington, Gloucester, Atlantic and Cumberland counties. Only fair production is expected in favorable locations. The production forecast is for 2,700,000 bushels as compared with the 2,600,000-bushel crop of 1929.

The Georgia peach crop is estimated at 2,550,000 bushels or approximately twice the production of 1929. This is considerably short of the five-year average for that state, which is 8,198,000 bushels.

DURING the thirty-ninth week of the Vineland Egg-Laying Contest the R. I. Red, owned by Woodview Poultry Farm, Mount Holly, crossed the 2,000-egg mark and has the honor of being the first New Jersey pen to perform this feat in any of the three contests. This entry with a total of 2,031 eggs to its credit stands fourth among all competitors at the Vineland Egg-Laying Contest and is the only New Jersey representative in the ten high pens to date.

The Massachusetts entry of R. I. Reds owned by Scott Poultry Farm, Groton, continues to set the pace for all competitors with a production of 2,144 eggs or an average of over 214 for each of the ten competing birds of the pen.

AT the end of the thirty-ninth week the order of the ten highest pens at the Vineland County Egg-Laying Contest is changed in an unusual way. A White Leghorn pen owned by Joseph Joachim, Riverton, which has been laying at a high rate of speed lately jumped from fourth place to second, displacing the Kerr Chickery entry of R. I. Reds from Frenchtown. The Kerr flock was forced past third place and now occupies fourth position, formerly held by Joachim's pen. The scores of these two entries at present are 1,896 and 1,797 respectively.

Eight of the ten highest pens in total production are owned by poultrymen in the state. Following the Fox, Joachim, and Kerr entries in first, second and fourth positions are a White Leghorn entry owned by Jerseyland Farm, Point Pleasant, ranking sixth with 1,782 eggs; George A. Petersen, ranking sixth with 1,782 eggs; another pen of Joseph Joachim's Leghorns from Riverton, eighth with 1,770 eggs; and two White Leghorn entries owned by Foxworth Farm, Flemington, ninth and tenth with scores of 1,701 and 1,690 eggs.

12 or 21 bushels of Winter Wheat per acre?

THE next time you hear a neighbor say he can't make money raising wheat, tell him what 8141 farmers in 13 winter wheat states say in answer to a recent questioning. Their estimate of production without fertilizer runs from 9 to 16.8 bushels per acre. With fertilizer 16.3 to 26.8 bushels. The average was 12.3 bushels per acre without fertilizer against 21.4 bushels with.

This year more than ever it is necessary to get big yields of high-quality wheat to make a profit. And the sure way is with a high-quality plant food—Armour's Big Crop High Analysis Fertilizer.

Big Crop gives wheat a good start before frost and helps it stand the winter. Big Crop helps wheat stool out with the first spring rains and develops long heads chuck-full of plump grain by the time harvest season rolls around. . . grain that grades high and brings the top price. A liberal application of Armour's Big Crop Fertilizer will increase your production per acre.

Another thing about Big

Crop that will interest you, it is never caked or lumpy. It always drills perfectly to the last ounce. An Armour dealer will help you figure how much Big Crop you will need this fall.



Armour Fertilizer Works Chicago, U.S.A.

**\$20 More
Income from
every acre of corn**

OHIO Experiment Station tests on yearling steers show that an acre of good corn silage earns \$20 more than an acre of corn fed as grain and stover. Likewise the Illinois Station found that corn silage, properly made, produces an extra income of from \$15 to \$20 per acre.

PAPEC
Non-Clog
Ensilage Cutters



SAVE AND BUY
Quick Acting
Fine as Flour
Low Cost

ALBA MARL

Nature's Soil Remedy
All Available
Granulated For
Easy Sowing

WRITE FOR GUARANTEED DELIVERED PRICES TO:
ALBA MARL LIME COMPANY, CHARLESTOWN, W. VA.

POTATO DIGGERS
The "Success Junior" for the small grower and the Elevator Digger for the large producer. Both dig, lift, sort and dump. Let us help you make more money from your potato crop this year.
A. B. Farquhar Co., Limited, Box 146, York, Pa.

THE ADVERTISEMENTS in Pennsylvania Farmer contain information that is valuable and important. Read them and when answering them mention Pennsylvania Farmer. It will help us and help you.



I BEGAN last week to try to portray the change that has taken place in agriculture and rural thought and custom during the past fifty years. All who lived in the country a half century ago, and who remember how country people thought and lived, know how great the change has been. At that time there was a real class consciousness. Farmers felt that they were different, and also believed that the difference was in their favor, at least as far as morals were concerned.

But the class feeling was equally strong in city people. Even those who lived in towns and villages looked with a degree of tolerance if not of contempt upon the rural dwellers. Writers, lecturers and cartoonists referred to farm people as "rubes," "hicks," and "hayseeds." Both sides accentuated the differences because both realized that there was at least a superficial difference. The farmer and his family could be picked out in a mixed crowd because of the difference in dress, complexion and deportment. The farm woman shunned her city cousins because she knew instinctively that her dress and millinery were less stylish, and the farmer often stood silent and abashed before the better dressed and more fluent town man.

Loyal to Each Other

Rural people were then more clanish than they are today. However much they might have wished they could be something else, they felt and acted a certain degree of loyalty to their community and their calling. This, no doubt, arose from the fact that not only their business but their entire social life was bound up indissolubly with the country. They thought together, talked together, met together and worked together. This lack of association with town and city people led inevitably to the formation of clannish thoughts and acts.

The difference in dress and personal appearance was caused, not entirely by a lack of desire nor a lack of cultural instinct, but because of the absolute lack of money with which to acquire the better things of life. The chief business of the farmer a half-century ago was to produce from the farm the greatest possible proportion of the family's living. Crops were planted with that end in view; stock was kept which would furnish a variety of meat and other products, and even the home was partially a manufacturing plant for converting the products of the farm into a living for the family.

Tax Horror Still Persists

On few farms was the making of money the primary purpose of the work carried on there. Of course, a few things must be bought—salt, pepper, sugar, spices, etc., and, of course, clothing material, although even this necessity was produced on the farm a few generations earlier. Two other greedy and inexorable demanders for cash were the money-lender and the tax gatherer. My present dislike of these things is due to the horror inspired when a child. So often did I hear the reference made to interest and taxes, and so thoroughly was I impressed with fear which the approach of collecting time inspired in my parents' breasts, that I have it to this day.

Most farmers in central Pennsylvania half a century ago did something else than farm part of the time in order to get the money necessary to pay the cash expenses. Of the few sidelines of business available, lumbering was by far the leading one.

That section of the state was covered with fine timber, mostly pine and hemlock, although hardwoods were found in some sections. The bark of the hemlock was used by tanneries in the tanning of leather, and thousands of tons were annually peeled, and hauled to market. The trees were cut into logs and these hauled to the mills, or to the creeks and rivers to be floated to lumber mills farther down the streams.

Gloried in Their Strength

The hard places in the life of those pioneering people could have been made smoother if the owners of the land had received something for the lumber which furnished them work. But at that time the forests furnished them work only, and for that they received wages which would be scorned by the wage worker of today. But such work was the salvation of the farmers of that time. It enabled them to pay what must be paid for in cash.

But I do not remember that father and mother complained about the long hours, the hard work nor the meager returns. They accepted life as they found it, possibly because they knew it was the common life of all who lived in the country. I think the people of that time rather gloried in the fact that they could successfully cope with so rigorous a life, and looked with more or less contempt upon the people of other callings, thinking them "soft" if not lazy.

No Time for Play

Farmers did not have many play times fifty years ago. Work days were fourteen to sixteen hours long, and weeks had at least six and one-half work days in them. Farm women may not have been more tired at the end of a day or week than they are today, but they were compelled to do more manual labor. On most farms they did all the milking, the raising and tending of the poultry, and the garden making. The boys and girls had their part to do and they did it for various reasons.

But to stop this article here would be to leave an impression with the younger generation that the people of that day had no fun. That is far from true. Possibly because opportunities for a good time came less often the people enjoyed them more keenly when they did come. Family visiting was then in vogue. The whole family would pile into a wagon, or a sled in winter, and go whenever and wherever the inclination led. Notices and invitations were not necessary. If the intended "victims" were found to be away, the visitors drove on to another place. But a welcome was sure to follow. Every good housewife was always prepared for a Sunday dinner. Only the occurrence of a calamity prevented a "fore-handed" farm wife from being ready to entertain unexpected visitors. And such a time as they all would have! Talk about fun! It is not a discovery of the 20th century.

Apple Pomace for Fertilizer

We have moved to a place where there are tons of apple pomace from an old cider mill. Would like to know if it is any good for fertilizer for a vegetable garden such as pumpkins, carrots, potatoes, etc. Also, how much to the acre should be put on it? J. W. Boward.

I REGRET that I have not been able to secure dependable information on the value of apple pomace for fertilizing vegetables. My guess would be that it might pay to go easy and make a test on a few plants the first year. Possibly some reader may volunteer a report of experience in this connection. G. S. W.

More Readers on Farms in Pennsylvania than Any Other Farm Paper

PENNSYLVANIA FARMER
Published Weekly
Established 1877

President Arthur Capper
Vice-President T. D. Harman
Editor-in-Chief Geo. M. Slocum
Manager E. S. Bayard
Nell Laing

New York 420 Lexington Ave.
Chicago 203 No. Wabash Ave.
Detroit 1632 W. Lafayette Blvd.
Philadelphia 1201 Chestnut St.
Cleveland 1011 Rockwell Ave.

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of Mar. 3, 1879.
PUBLISHED EVERY SATURDAY BY

CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., July 12, 1930

No. 2



Scenes like this are hard for the fisherman to pass by without trying his luck.

Farm Editors in Canada

By M. C. GILPIN

FARM paper editors are queer ducks. At least that is the opinion of some readers, while others are less complimentary and more emphatic in their opinions. But with all their failings these so-called editors have certain human qualities which make them acceptable in polite society, when properly chaperoned. Having associated daily for two weeks with editors from most of the farm papers in this country we have concluded that their queerness is more apparent than real, that they possess fair intelligence, excellent digestions and rare judgment, especially in the choice of wives.

This weighty opinion is part of a load of ideas, impressions and information acquired on a tour of eastern Canada with the American Agricultural Editors' Association as guests of the Canadian government and Canadian railways.

Leaving Windsor, Canada, which is across the river from Detroit, on June 12th, we traveled north several hundred miles, then east to the Atlantic coast and back along the St. Lawrence river and Great Lakes to Windsor, completing a triangle of some 4,500 miles. For fourteen days we saw a constantly changing panorama of great scenic beauty, a land of unexpected natural resources, inhabited by a courageous, progressive, capable and friendly people.

We learned that many of our preconceived ideas of our northern neighbor were far from the truth. Eastern Canada is not a small strip of backwoods territory shivering on the edge of the Arctic Circle, but an immense region of agricultural, forest, mineral and power resources, both developed and in the pioneer stage. The climate in June compares with that of Pennsylvania. Grasses, shrubs and flowers that thrive here flourish there and any of the same crops are grown as in our state. The winters are long and cold, but when spring comes vegetation grows very fast. We saw grass six inches high where snow had lain two weeks before.

In southern Ontario, which is across Lake Erie from Ohio, is a rich and well-developed agriculture. The soil and climate are similar to that of our mid-west Corn Belt, and formerly corn and hogs were the main source of farm income. Here is where the corn borer got its foothold this side of the Atlantic, and did so with such enthusiasm that corn growing has gone out of fashion. A few years ago it became plain that other crops must be found to take the place of corn. Tomatoes, beans and tobacco were tried and the borer starved it to a certain extent. Then considerable corn was planted again, but though tough borders were planted the borer did not dampen the "corn growers' hopes." Corn is now grown on a system of clean culture, but the borer remains a strong contender for the hold. This fertile region is suitable to a variety of crops, and will doubtless continue to be a prosperous farm section in spite of the borer.

Some idea of the farming area and conditions in Ontario is found in the fact that the province produces a half billion dollars worth of farm products a year. Dairying plays a prominent part; the annual production of the dairy industry is valued at \$100,000,000. Much of the cheese that goes to the British market comes from Ontario factories, and the dairy breeding stock is well and favorably known in this country. Fruit growing is successfully practiced, as is tobacco raising, in the southwestern part of the province.

At Guelph we visited one of the pioneer experiment stations on this continent. If readers notice a repetition of the expression "on this continent" they can attribute it to the Canadian influence, for the people in the Dominion use it as a handy means of comparison when in their modesty they refrain from saying "in the whole world" as taking in too much territory for credulity. Canadians are like Americans in many things, one of which is in pride of their country and its institutions, and as with us that pride seems justified.

The Ontario Agriculture College was established at Guelph in 1874 with 28 students. Now it has 26 large, substantial and well-equipped buildings, nearly one acre for the first students—a farm of over 700 acres of high-class land and some 200 head of livestock. The campus is extensive and beautifully landscaped as are all of the agricultural colleges and experiment stations we visited. One thing that strikes the visitor throughout Canada is

instead of deploring the low price of hogs or milk are distressed at the low price of silver, which is now around 26c an ounce, compared with 40c in better days. However, cobalt, a by-product of silver, is of more commercial importance, since it is now combined with steel to make an especially hard material useful for sharp-edged tools.

We stopped at Cobalt, a mining town, and went through a silver mine. The metal is found in vertical veins or cracks in the rock, not horizontally like coal. So silver mining is a very much up and down proposition. We look straight down a dizzy distance and see a miner drilling a hole for dynamite which blasts off a chunk of rock.

The silver usually occurs in small particles mixed in the rock. Occasionally it is found in pure lumps or sheets weighing several pounds. The rock is ground and put through a process which separates it from impurities. The silver is then melted and poured into molds. The pigs of metal resulting are about four inches square by twice as long and weigh some 80 pounds apiece. Such an ingot is worth about \$200. None of our party tried to sneak any of them away in their pockets.

The mines in this section have yielded over a billion dollars worth of metal. About \$5 per cent of the world's nickel comes from this locality, which is also the world's chief source of cobalt and source of the largest production of gold on the continent.

Not much can be said for the appearance of the mining country. One especially ugly-looking place partly filled with grey slime was once a lake which was drained to get the metal found in its banks. This was Lake Cobalt where the first silver was discovered in this section.

One story of the discovery is to the effect that on a Sunday afternoon in 1903 a couple of railway contractors were killing time by throwing small white pebbles into the water. They noticed that the pebbles were silver and thus the secret was out. The other tale states that an engineer in a spirit of recklessness (Continued on page 20.)



The Prince's Gate, Exhibition Fair, Toronto, Canada. The Toronto Fair is one of the leading farm shows on this Continent.

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published Every Saturday by
CAPPER-HARMAN-SLOCUM, INC.
7201 Penn Ave., Pittsburgh, Pa.

President: Arthur Capper
Vice-President: T. D. Harman, Geo. M. Slocum
Manager: N. L. Laine

EDITORIAL STAFF
Editor-in-Chief: E. S. Harlow
Editor: C. L. White, M. C. Gish
Field Editor: Miles Horst, G. W. Horst

EDITORIAL OFFICES
Pittsburgh: Harlow
Philadelphia: Horst

CONTRIBUTING EDITORS
R. P. Kester, J. C. Lipman, H. C. Knudsen
Alva Mace, E. L. Scherling, H. C. Knudsen
J. F. Shigley, S. W. Fletcher, Mrs. Gertrude Stewart
G. C. Hisingame, A. V. Norland, Gilbert S. Watts
F. L. Bentley

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR.
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per line per week, or \$14.00 per inch each week.
Minimum space 5 lines. Special rates on application for
long-term and classified advertising. No deceptive, immoral or
slandering advertisements inserted at any price.
Member Agricultural Publishers' Association,
Audit Bureau of Circulations

Volume 36, No. 2 Established 1877

DR. WILEY

DR. HARVEY W. WILEY, scientist and pure food specialist, died at Washington, D. C., on June 30th, aged 86 years. Nearly a half century ago Dr. Wiley, then chief chemist in the Department of Agriculture, began a crusade against adulterated foods. So well did he succeed that the idea of pure food has been written in the laws of the land and is etched on the minds of its people.

LOW PRICE OF MEAT

The present low price of live-stock will increase the consumption of meat and ultimately benefit both producer and consumer. The optimistic opinion of Charles D. Carey, chairman of the National Live-stock and Meat Board. It is true that our meat consumption could be increased, as could our consumption of many food products, without hurrying anybody, and it is to be hoped that the live-stock and meat industry will embrace this opportunity of informing the public concerning the economy of meat in the diet. Consumers quickly learn about the extravagance of meat when the price is high. It is only fair that they be likewise informed when it is low.

ACREAGE REDUCTION

We may expect to hear considerable about acreage reduction during the remainder of this year. Meetings are scheduled in the West at which speakers will explain to farmers how they cannot hope to control prices without controlling supply. The department of Agriculture in its wheat outlook warns farmers that prices may be relatively low for the next six to ten years and suggests acreage "adjustments" to meet the situation. How far individual farmers will follow this advice is uncertain, but no hearty response is yet reported, while some strong opposition is noted. Right or wrong, the common human attitude of letting the other fellow do the reducing seems to prevail and it will take much eloquence to change it.

OUR MARKETING SYSTEM

Our wasteful marketing system is the theme of much denunciatory discussion. It is blamed for most of our ills when we run out of other handy objects or institutions to blame. But so far all the critics and reformers have been unable to improve it. In a free country where equal opportunity is extended to all it would seem that some enter-

prising genius imbued with the sordid motive of personal gain would bring forth a perfect system, save the nation and be well paid for it. Most of the plans to improve the system confine themselves to an airing of its defects, but are noticeably shy of more economical means of rendering the same service. Possibly we have evolved a pretty efficient marketing system after all.

FROM LIFE

WHEN President Roosevelt's Country Life Commission was under discussion a certain young man got a great deal of publicity and was supposed to be an authority on the subject. His employers, however, were willing to part with him, so a better place was found for him in a department of the government that has been a convenient unloading chute for many years. The officials of this department did not cling to him tenaciously after he had been there awhile, releasing him to a place in a certain state institution at a better salary. After some months there the authorities of that institution were convinced that they should share their experience with a distant institution, so he was again promoted to a still better position. Now he is enjoying a goodly title in another official agency, but we don't know who was responsible for this last transfer. Such are the uses of publicity in starting a man; and such was the value of incompetence in advancing this one.

COMPULSORY POOL

A COMPULSORY wheat pool in the prairie provinces of western Canada is proposed as a remedy for the rather unsatisfactory situation in which wheat farmers find themselves. For the non-poolers profited by staying out of the pool, selling their crop at \$1.30 to \$1.50 a bushel last fall, while the pool advanced a dollar a bushel to members and has made no further payment. Nor is it likely to in view of the present market level. How a compulsory pool can make headway in this situation may be puzzling, but the cooperationists are vigorously agitating it in spite of the fact that considerable bootlegging of wheat is now reported. That the ancient economic laws have not been suspended by the Canadian pool is becoming evident. The idea of control, which is the real aim of the compulsory pool advocates, is but a dream as long as other parts of the world can and will raise wheat.

LABELED STEAKS

The lengths to which the public will go in demanding standardized food products apparently has no limit. The sugar scoop and the cracker barrel have disappeared from grocery stores. Everything from fresh asparagus to clipped beef and sliced bacon is sold in fancy packages under a highly colored label. But the end is not yet. In 1927 the federal government inaugurated a system of beef grading and labeling. Roller stamp-mark the official grade label on each cut. The plan has been popular. Demands of the meat industry and large beef buyers have led to an extension of the system. Beginning this month official graders will be stationed at slaughtering establishments in Erie, Buffalo, Cleveland, Detroit and St. Louis. Others now at work in Philadelphia, New York and most other large eastern cities are busy stamping steaks and roasts as U. S. Prime, U. S. Choice, U. S. Good or U. S. Medium. These days the city man needs only to know how to read to be a discriminating buyer.

NOT A FAD

A READER suggests that to increase the consumption of milk we discard inspection, pasteurization, etc., and sell the

product the old-fashioned way "out of a can with a dipper at 10c a quart, paying the farmer 5c a quart." Modern milk sanitation is not something thought up by faddists looking for trouble, but the result of experience which has shown the necessity of such care under modern conditions. Anything which might lessen the consumer's confidence in the wholesomeness of milk would decrease rather than increase consumption. Few foodstuffs are delivered to the consumer as quickly and cleanly and with as little lost motion as milk, says O. E. Reed, chief of the Federal Bureau of Dairy Industry. The best insurance of a broad outlet for dairy products lies in maintaining a high standard of quality for these products.

MORE COSTLY THAN QUAKE

A SOUTHERN congressman, speaking in favor of the reservoir system of flood control in the Mississippi valley, cites the danger of earthquakes as an argument in favor of his plan. He quotes eminent geologists on the instability of the earth's crust caused by the deposit of river-borne soil from half the United States at the mouth of the Father of Waters. By his plan, land-carrying floods would be checked by storing excess water in the soil and in reservoirs along the Mississippi's tributaries.

Man's efforts may do little to stay the gradual wearing down of the earth's land masses, a recognized cause of earthquakes. But this congressman's speech is interesting because it emphasizes the extent of soil erosion. Every bare field loses a layer of its best soil with every rainstorm. The effect of that loss geologically is small and remote; the economic loss to the land owner is immediate and very much greater than commonly supposed. We are constantly impressed by the widespread use of soil-holding and soil-building cover crops among prosperous farmers. Some practical suggestions on the subject appear elsewhere in this issue.

SPECIAL TRAIN ASSURED

UNUSUAL activity of geysers in Yellowstone Park, coincident with the official opening of the season, is reported by the National Park Service of the Department of the Interior. "As though aware that the Yellowstone National Park season has begun and striving to do their very best for the edification and entertainment of park guests, geysers in the various basins are alive with action."

We are glad for this assurance that the geysers are on the job ready to perform for the Pennsylvania farmers and their friend who will start July 26th on the Pacific Northwest Tour being sponsored and conducted by this paper. All along the line every one concerned with the tour seems similarly alert.

We have been asked about the present status of the tour. Here are the facts:

More than enough reservations have been received to assure us of movement by special train.

Going by special train, we shall have more time at some of the points of interest than is shown on the published schedule.

Several new but unadvertised features have been included in our plans to add to the pleasure and comfort of those who make the trip.

Sixteen members of our last winter's Florida-Cuba Tour have made reservations for this summer expedition.

We shall try to add enough cars to our special train to take care of late comers.

Requests for reservations should reach us by July 15th. We hope to accommodate those coming later, but cannot promise.

The essential details about this unique low-cost, care-free vacation trip appear on the opposite page.

New Jersey Farm Comment

By G. W. HARRIS

Still Room for More Facts about the Pennsylvania Farmer Pacific Northwest Tour, July 26 to August 10

It is just a friendly sort of tour for farmers and their friends.

It goes to places all of us have wanted all our lives to see.
If you join us you will spend three days in strange Yellowstone; you will ride for hours on a Pacific steamship; you will pow-wow with Indians in Glacier Park; you will cross the Great Plains, the Wheat Belt, the Corn Belt, the Cow Country, the Rocky Mountains; you will see Niagara Falls and the West's important cities.

You will travel by special all-Pullman train, with comfortable automobiles, and motor buses for the numerous side trips. You will have meals you will never forget. You will make new lifetime friends.

No bills to pay.—Every necessary expense is included in the advance payment. You can have a good time without your pocketbook.

No tipping.—Someone else will attend to that.

Details, costs and schedules appeared in recent issues. If you missed them or have other questions, write immediately. All reservations must be made within the next few days. We anticipate a wonderful trip and want all who can to enjoy it with us.

Address Tour Manager, Pennsylvania Farmer, 7301 Penn Avenue, Pittsburgh, Pa.

and keenest observations concerned the types of grading machines used on the many farms visited and the efficiency with which the Delaware and Maryland growers were producing clean fruit. The visitors were quick to observe those orchards where inefficient spray methods had resulted in damage to the fruit crop. We wager that most of them on returning home inspected their own orchards with the hope that they were doing a better or as good a job of producing clean fruit as their competitors.

SOUTHEASTERN Pennsylvania potato growers meet at the National Farm school near Doylestown, July 29 and 30, for two field days. This is being sponsored by the Bucks County Potato Growers' Association and may attract many interested New Jersey growers. It is well to know what your neighbors are doing along production lines.

Demonstrations of potato machinery, lime slaking and cultural practices will be held in the 23-acre field of Russets at the Farm School.

Those who have never visited the National Farm School and are not acquainted with its purpose and operation might well take this opportunity to learn. The National Farm School is a school operated for those boys who are not financially able to attend college and who wish to learn to farm. All of the work on this large farm is conducted by the students, and while they are receiving theoretical training they also are doing the practical work.

NEW JERSEY poultrymen will spend three days visiting Pennsylvania poultry farms beginning August 4. This tour by motor bus is being sponsored by the New Jersey State Poultry Association.

At present the plans, as outlined by L. M. Black, secretary of the association, are to visit near York the farm of Guy Leader, Master Farmer of 1929; Paul Guldin's at Reading, where a number of old farm buildings have been remodeled for poultry; and the Taylor Brothers' White Leghorn plant at Newton.

During the trip a visit will be made to the Gettysburg battlefield. On the return a stop will be made at the Cane Poultry Farm at Rosemont, N. J.

NEW JERSEY is making extensive plans to have a large delegation attend the American Farm Bureau annual meeting which will be held in Boston this December. The fact that this meeting is being held in the East this year will afford many New Jersey farmers the opportunity to attend this gathering for the first time.

DO not forget the annual state picnic of the Farm Bureau and Grange at Atlantic Highlands in Monmouth county next week, July 17. Samuel H. Thompson, President of the American Farm Bureau, and Hon. L. J. Taber, Master of the National Grange, will speak to this group.

THE New Jersey Extension Service says that 3,177 New Jersey farmers this year modified their production plans to conform to recommendations of the state agricultural outlook report of 1930. This report was prepared by W. F. Knowles, extension service economist, and the U. S. Bureau of Agricultural Economics.

No report is given as to what practices and plans were changed, but possibly at the end of 1930 we may be able to learn just what losses these 3,177 farmers might have suffered had they followed their original production plans.

NEW JERSEY birds will compete against flocks from all over the world when exhibited at the Fourth World's Poultry Congress at London from July 22 to 30. Sixteen leading poultrymen in the state shipped their birds last Saturday from New York on the S. S. Minnewaska enroute to London. Accompanying the shipment of 300 American fowls is Professor Willard C. Thompson, chairman of the exhibit committee, and M. L. Chapman of Robbinsville, N. J., vice-chairman.

The New Jersey entries by breeds are: Barred Plymouth Rocks—Brielle Poultry Farm, Brielle; Newton Cosh, Vineland, and Kerr Chickeries, Frenchtown. White Plymouth Rocks—Hayward B. Spangler, Matawan. Buff Plymouth Rocks—Harry N. Conner, Stockton. White Wyandottes—Charles D. Cleveland, Eatontown. Columbian Wyandottes—Louis D. Schable, Shiloh. Jersey Black Giants—Marcy Farm, U. L. Meloney, Matawan, and William E. Roch, Columbus.

Jersey White Giants—Marcy Farm, U. L. Meloney, Matawan. S. C. White Leghorns—Dembro Poultry Farm, Sewell, and Vreeland Egg-Laying Farm, Little Falls. American Dominiques—Paromont Farms, Eatontown. S. C. Rhode Island Reds—J. Clifton Lambert, Jr., Scudder Falls, and Kerr Chickeries, Frenchtown. S. C. Black Minorcas—Coventry Farm, R. L. Benson, Princeton. Buttercups—Charles E. Hall, Egg Harbor City. White Orpingtons—Jill Farm, J. I. Lyle, Plainfield.

W. F. KNOWLES reports that in New Jersey the peach crop is spotted, especially in the heavy peach producing sections of Burlington, Gloucester, Atlantic and Cumberland counties. Only fair production is expected in favorable locations. The production forecast is for 2,000,000 bushels as compared with the 2,600,000-bushel crop of 1929.

DURING the thirty-ninth week of the Vineland Egg-Laying Contest the R. I. Red pen owned by Woodview Poultry Farm, Mount Hope, crossed the 2,000-egg mark and has the honor of being the first New Jersey pen to perform this feat in any of the three contests. This entry with a total of 2,031 eggs to its credit stands fourth among all competitors at the Vineland Egg-Laying Contest and is the only New Jersey representative in the ten high pens to date.

The Massachusetts entry of R. I. Reds owned by Scott Poultry Farm, Groton, continue to set the pace for all competitors with a production of 2,144 eggs or an average of over 214 for each of the ten competing birds of the pen.

AT the end of the thirty-ninth week the order of the ten highest pens at the Hamden County Egg-Laying Contest is changed in an unusual way. A White Leghorn pen owned by Joseph Joachim, Riverton, which has been laying at a high rate of speed lately jumped from fourth place to second, displacing the Kerr Chickery's entry of R. I. Reds from Frenchtown. The Kerr flock was forced past third place and now occupies fourth position, formerly held by M. J. Joachim's pen. The scores of these two entries at present are 1,806 and 1,797, respectively.

Eight of the ten highest pens in total production are owned by poultrymen in the state. Following the Fox, Joachim, and Kerr entries in first, second and fourth positions are a White Leghorn entry owned by Jerseyland Farm, Point Pleasant, ranking sixth with 1,782 eggs; George A. Pearce's Leghorns from Whitehouse, holding seventh place with 1,781 eggs; another pen of Joseph Joachim's Leghorns from Riverton, eighth with 1,770 eggs; and two White Leghorn entries owned by Fawcett Farm, Flemington, ninth and tenth with scores of 1,701 and 1,696 eggs.

Dairymen Adopt Definite Breeding Program

By E. J. PERRY

DAIRYMEN in increasing numbers are adopting a definite policy pertaining to herd improvement. This consists in having in mind eight or ten years of service for a bull instead of two or three years, and of proving him and using him several years provided he proves himself meritorious. Many dairymen when buying a bull still reason that they can afford to use him only two or three years because they plan to use him only two or three years after which time, as they see it, he should be butchered because he is dangerous and troublesome to handle.

Increasing numbers, however, are thinking six or eight or even 12 years ahead when purchasing a bull. They are building "safety bull pens" with exercising paddock. They appreciate first that there is a vast difference in the producing ability of bulls and that a number of years are needed to "test" them and learn their true worth; second, that it pays to buy a bull of excellent breeding and type for proving. Investing little in a commodity usually means getting little and a bull is no exception to this truism.

Bull Associations Most Economical

The proving of bulls is most easily accomplished through bull associations. The rotating of bulls from block to block every two years avoids inbreeding and permits linebreeding. The term inbreeding usually implies a close mating such as the mating of full brother and sister, half brother and sister or parent and offspring. Linebreeding is the mating of related but not closely related individuals such as cousins, grandparents and grandoffspring, half uncle and niece, etc. Better bulls can be used at a lower cost per farm.

A typical example of such economy is noted in a certain association composed of 16 farmers who previous to organizing their association owned 16 bulls with an average value of \$100 per head. These were disposed of and five excellently bred sires were secured at \$250 apiece or an average cost of \$78.12 for each member. Thereafter only one bull had to be fed where three or four were previously fed. Furthermore, good breeding was available to each farmer regardless of the size of his herd.

In certain communities there seem to be various obstacles in the way of the organization of successful bull associations. What is the best method of procedure for the man who is convinced that he prefers individual ownership of his bull? What steps are most likely to reduce speculation in his effort to raise a herd of high producing cows? Logical steps based on the latest findings in genetics and on practical workability seem to be:

1. Buy or lease a proved bull if possible.
2. If buying a young bull, buy a son of a proved bull.
3. Be sure the pedigree of a young bull contains records of high production, particularly by the first six ancestors.

Strictly speaking, a proved bull is one that has been tried or tested by the comparison of the milk and fat records of several of his unselected daughters with those of their dams. A bull that has proved himself able to transmit high production and desirable type should probably be called a "successful" sire.

The interest in good proved sires and the demand for them are growing. Few are available now. The owners of such are loath to sell them but they are often willing to consider exchange or lease for one or two years. Progress in disease control should further encourage this policy. Many dairymen are having good results by breeding sire to grand-daughter. This is a good example of linebreeding.

It is often said that the pedigree of a good proved sire can be forgotten. A pedigree can be likened to a promissory note. The "successful" sire is the fulfillment of the promise contained in the pedigree. An example of the uniformity with which certain bulls are able to transmit production to the daughters is illustrated by the following comparison of 11 daughters and their 9 dams.

The daughters were sired by King Ormsby Jo Especial 442627, a Holstein bull recently purchased by the Dairy Department of the New Jersey Agricultural College. The 20 animals are owned in Bucks county, Pennsylvania. They are fed and managed in the same herd under identical conditions and the records were secured through a Dairy Herd Improvement Association. All records have been figured to maturity. Repeated experiments have shown that two-year-olds will produce approximately 70 per cent, three-year-olds 80 per cent, and four-year-olds 90 per cent as much as they will produce as 5-year old mature cows.

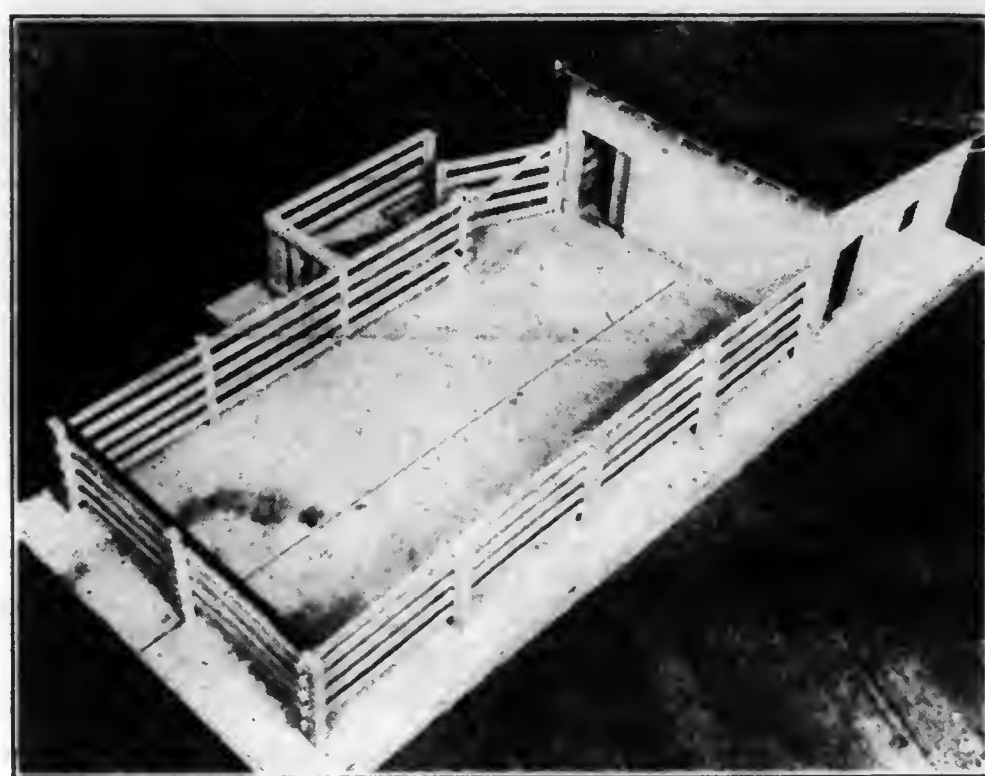
Records of the Dams of the Daughters				Records of Daughters of King Ormsby Jo Especial			
No. of	Lbs.	Lbs.		No. of	Lbs.	Lbs.	
Cow	Milk	Fat		Cow	Milk	Fat	
1	13338	418.6	1	13583	459		
2	13336	432.9	2	16960	549		
3	11802	420.7	3	13751	479		
4	11802	420.7	4	15049	471		
5	11784	368.8	5	14549	464		
6	11588	377.0	6	17139	517		
7	11588	377.0	7	14216	425		
8	10999	312.1	8	14730	477		
9	10357	344.2	9	14764	496		
10	9345	325.1	10	13990	462		
11	6608	199.2	11	12950	414		
Av. of dams	11140	363.3	Av. of daughters	14698	474		
Increase of daughters over dams—milk					32 per cent		
					fat 31 per cent		

Of these nine different dams nearly all more than one yearly record; the largest ones were selected for this comparison. The daughters' records were made as two and three-year-olds.

Selecting a Young Bull

In selecting an unproved bull the thought uppermost in mind should be to get one with a pedigree that strongly promises the transmitting of production. First of all an effort should be made to buy a son of a proved sire. According to Galton's law on animal inheritance 75 per cent of his total characteristics from his parents and grandparents—25 per cent from each parent and 61 per cent from each grandparent.

A popular question is, "Which parent and grandparent contribute most to the offspring and what



This type of bull pen and paddock is now being built on many dairy farms in New Jersey and other states. The yard is 16 by 48 feet and the pen is 12 by 16 feet. Note location and construction of breeding rack which makes it unnecessary to handle the bull at any time.

to produce and the ability to transmit production are two distinct factors and frequently both are not possessed equally by the same individual.

The sire's record is the most important record in the whole pedigree. The records of his daughters constitute his record. His record therefore is a record of his power to transmit production. The Missouri Experiment Station advises it can reasonably be expected that a proved sire will continue to transmit to his sons and daughters alike the same type of production that he gave to his first six or more unselected daughters. This fact is of momentous importance. Such a record of a proved sire is a great deal more prophetic than the dam's record in predicting the transmitting powers of a young bull. Of course if the dam had six daughters with yearly records, then her achievements through them would be just as indicative as the record of a proved sire in predicting the future worth of a young bull.

The dam's individual record is quite important. A young bull's pedigree is greatly strengthened by a high record dam, but thousands have been disappointed in the past by staking everything on a bull because of his dam's record. It takes more than one record in the first generation backward to augur well for a young animal's propensity. Every dairy breed is replete with classic examples of noted cows that made great records but were unable to transmit to their sons and daughters those factors that made themselves high producers.

Padded Pedigrees Misleading

Every one purchasing a herd sire or other registered animal ought to be able to distinguish between the records in the pedigree and that irrelevant information that often characterizes many of our present day pedigrees. Breed associations would do well to try to discourage this "padding" of pedigrees by sales companies and others writing up these family histories. The honest pedigree is the simple one which contains only the names and registration numbers of the ancestors and their actual production records with the ages at which they were made. Under the names of sires should appear the number of record daughters and some of the leading records made by them. Any outstanding show ring honors may well be included. Such an insertion as "a great great grand-daughter of a half brother to a world record cow" means little or nothing genetically and merely fills up under the animal's name that valuable space reserved for the records that are missing.

More than 200 bull pens have been built in New Jersey during the past two years. Dairymen admit it is risky to keep a full aged bull in a cow stanchion or to allow him to run with the herd. A special place is needed which will "hold" him and at the same time permit plenty of exercise. This calls for an outside paddock 45 or more feet long and 14 to 18 feet wide. Such pens can be fancy and expensive or simple and economical. The writer recently saw a paddock built out of timber from the farm woodlot. The only expense in addition to the labor involved was \$8 for bolts and nuts.



King Ormsby Pontiac Cagnes is a six-year-old proved bull that has been successful. He was owned and proved by Lester Harris of Hancock's Bridge and has been exchanged for a sire from the Mulliken Hill Bull Association.

is the relative value of each record?" The answer is of signal importance to every dairymen who raises his own replacements. The sire and dam contribute jointly on the average to the germ plasm of the progeny. But there is a difference of purity for certain dominant characters, hence either the sire or dam in certain cases may be the more prepotent and reveal in their progeny their own peculiar desirable characters more than the other. It must never be forgotten that the ability

Milly Woodbridge's Trek to the Pacific

The Pioneers of the Peace River Valley

By C. A. Stephens

Copyright, 1929, by Capper-Harcam-Schoon, Inc.

ALL that long day they tugged and toiled; for now the sun rose at five o'clock and did not set until between seven and eight in the evening. They set chunks of logs on the raft for seats, and strung their ropes—the former halters of Brighteyes and Old Peregrinations—round the margin of the raft, to catch by in cast anyone fell overboard. Winthrop fashioned a long oar from a slab of pine, for steering the queer craft, and also cut poles for pushing off and fending from shore.

There was so much to be done that they were obliged to spend another night there at "Camp Misery," as they named it, and did not make a start till past ten next forenoon. At last, with their outfit packed and lashed on the raft, they pushed off, having no knowledge whatever as to the rapids and falls there might be ahead. The Babine River at this point, they said, was a clear stream of moderate current, about a hundred yards wide, flowing steadily to northward through a wooded country where as yet there was no sign of human habitation.

It was Milly's business to sit at the forward end of the raft and watch for rocks and bad water, while Winthrop and the squaw poled or fended off as required. Mostly they trusted to the current to bear them on. Mike had jumped aboard of his own accord, when he saw them embarking, and after catching his balance on the rocking platform, sat down beside Milly to watch the river with her; he seemed to understand about it, and had evidently been on boats or canoes before. As they went on, Mike sniffed the air of the shores at times, and occasionally muttered little growls under his breath—probably bear scent, or wolf.

Late that afternoon, as they were passing close to the mouth of a small tributary stream, Winthrop shot a yearling elk; and they fared better that night, camping near by on dry ground in a grove of pines.

Through much of the same kind of country they floated on for three days, their only adventure being at a rapid where they found it safer to land and check the speed of the raft with their pole, passed from one tree to another along the bank. They came to no dangerous falls. On the fourth day they reached the junction of the Babine with a larger river flowing from the north, which they had no doubt was the Skeena. Rougher, swifter water succeeded for two days when they came to the confluence of the Skeena with another large stream, flowing from the south, and an hour or two afterwards, heard the distant whistle of a locomotive; a sound that neither Milly nor Winthrop had heard since migrating to the valley of the Peace four years previously! It gave them strange sensations. Winthrop shouted; Milly was near shedding tears; for they knew that they were now approaching the new line of the Grand Trunk Pacific Railway, extending up from the ocean at Prince Rupert.

EARLY next day they passed a salmon cannery perched on a bluff near the north shore of the river, which had now widened to the breadth of a mile or more; and before noon that day they came close upon another larger cannery and settlement on the south side. Behold, too, there was a river steamer, that, its funnel smoking blackly, moored to a sharp hard by! After being so long isolated in the wilderness, these sights and sounds of civilized life impressed them wonderfully. Good indeed it seemed to be again among mankind, and a comforting sense of human companionship stirred their hearts.

Better earnest of such companionship was ere long accorded them, after the hearty manner of the Great West. As the raft drifted slowly past, they saw a man afterwards found to be the captain and owner of the little steamerboat leaning out at the window of the wheel house observing them curiously. No doubt they presented a picturesque appearance in those canvas suits! Presently he addressed them. "Where are you bound on that raft?"

"Prince Rupert," replied Winthrop. "Can you tell how far that is?"

"A hundred and forty miles or so. But where you hail from?" the captain, Captain George Kerwin, inquired.

"Peace River Valley, near Fort St. John," replied Winthrop.

"How did you come here?" the captain exclaimed in astonishment.

"I came by dog team," the captain replied.

"Mostly afoot through the mountains," said Winthrop.

"No!" the captain cried incredulously.

"But we certainly did," Winthrop assured him.

"Well, well, that beats me!" was the captain's comment. "Don't you want to take passage on my

boat?" he asked. "I'm on my way to Prince Rupert. Shall leave here in an hour."

"We have no money for steamer tickets," Winthrop explained.

"You will make a bad passage down there on that raft," the captain warned them. "The tide will bother ye. You'll meet it and get carried back."

"But we've no money for tickets," Winthrop repeated; and they were floating past when Captain Kerwin hailed again. "You come aboard and go down with me."

"That will be all right," he added. "Anybody that's come as far as you have to get to Prince Rupert deserves a lift."

Winthrop hastily consulted Milly. She thought the offer was not one to be refused. They poled the raft to shore a little way below where the steamerboat lay, took off such portions of their outfit as it seemed worth while to save, and went aboard, Pinky-Blue and Mike following after.

Captain Kerwin proved very hospitable and had a great many questions to ask concerning their long journey westward. But over these details we need not linger. By ten-o'clock next forenoon the little steam craft had doubled the bold headland at the mouth of the Skeena and entered the deep, landlocked harbor of Prince Rupert—the goal of all that weary journey.

Truth to say, this new city of the North is not exactly a beautiful place—as yet. It sprawls along its waterfront in what looks like an uncouth notch, cut in the encompassing green forest. Rocky ridges and deep coules lead up to a rearward height, ambitiously named Acropolis Hill; while still farther in the background frowns a lofty, rugged mountain side. But it has great expectations; and new towns are rarely ornate during their first decade. Fifty years hence Prince Rupert will no doubt have grown to be a handsome metropolis.

Half an hour later our adventurous young travelers had landed, thanked Captain Kerwin for his kindly courtesy, and were ashore in this new seaport, ashore and adrift!

"And what now, Milly?" Winthrop said. "Shall we go hunt up the Mastermans?"—for as yet they did not know that the Mastermans had left Prince Rupert. "I suppose you would like to see Quinby!" he added with a brotherly grin.

"Not looking as we do now!" rejoined Milly with promptness and a hurried glance at their strange, soiled garments. "Wint, you and I need a good deal of fixing up before we are fit to see, or be seen by, any of our former friends!"

"But new clothes are not given away and we've no money, Milly," Winthrop remarked joylessly.

"We have those two gold pieces that poor Mother saved for a time of great need, and if she could see us as we look now, I feel sure she would say that the time had come!" replied Milly with conviction. "But first we must get lodgings of some sort and take care of Pinky and Mike."

In short, their first few days there were occupied less in viewing the new town than in providing themselves with decent clothes; for they had arrived in tattered boots and those queer-looking garments made from the old canvas tent. In the wilderness such garb did not much matter; but the first sight of well-dressed people on the streets rendered a change for the better imperative.

It must be confessed that necessity compelled them to use the two gold pieces which their mother had so painstakingly laid by. It was now summer weather again. Outer wraps could be dispensed with; and Milly relates with much laughter that she contented herself with a checked gingham gown, a cheap but pretty hat and a pair of shoes along with hose and underwear. But, alas, it cost twenty-eight dollars, Canadian money! Fortunately United States gold was then at a premium. A cheap, ready-made suit, boots, socks and a cap, at eighteen dollars, sufficed for Winthrop.

THERE remained, too, poor Pinky-Blue to be looked after. They hadn't the heart to turn her adrift, after all that long journey together. "And if you could have seen Pinky today!" Milly behind us in the streets you couldn't believe it. I said that she looked radiant!" Milly declared. "Pinky was a sight! In almost any other place I am afraid the police would have locked her up in the interest of public decency! Everybody turned to stare at her. Pinky, too, was on the broad grin! She was barefoot. We had to buy shoes for her, also a calico gown and a boy's cap."

"In fact, Mike was the only one of us who did not need a brand new outfit; and when I saw how fast our money was going, I fairly envied Mike his lovely natural white coat and his brown ear!" "We had to have inexpensive lodgings, too, for I was determined not to see or even inquire for our former neighbors till we looked a little less like tramps!"

All of which Milly told me in apology for what necessity drove them to do, namely to cash that five ounces of loose gold they had found in the finger of an old glove in that deserted hut on the Finlay.

"We hated to do that," Milly confessed. "But we kept strict account of what it brought, and promised ourselves to return it later to the heirs of the dead miner whenever they could be heard of."

"We treated it as a temporary loan," Winthrop explained. "I felt sure the poor chap would have agreed. We buried him anyhow, and I worked hard to dig his grave. We thought he would have been willing to lend this to us for a few months, till we could return it to his people."

Meantime they were near losing the faithful Mike. This happened the day after their arrival at Prince Rupert while Milly and Winthrop were abroad in the new town. As usual Mike was following close after them, with Pinky-Blue not far behind, when a well-dressed man—a lawyer, perhaps, since he carried a small green bag—stopped short with a suppressed exclamation. Then as Winthrop glanced round, he cried,

"I SAY, you! Beg pardon, but where did you get that dog?"

"Why do you ask?" Winthrop inquired.

"Why, because that's my dog. I would know him among a thousand!"

"It's a dog that came to us at the Babine Lake, last winter, two hundred and fifty miles from here," Winthrop explained.

"Well, that's my dog," the stranger insisted. "He was stolen from me a year and a half ago. His name is Mack."

Milly had now turned. "We call him Mike because he seemed to answer to that name," said she.

"Well, his name is Mack. I named him that for a friend of mine at Vancouver—Alexander McNicol," the stranger asserted. "Mack, Mack, come here!" he cried. "Don't you know me, Mack? Of course you do, old boy!"

Mike wagged his tail, pricked up his brown ear and half turned in answer to the call, but glanced at Milly and took a step nearer her.

"But you see he knows me!" the stranger exclaimed. "Didn't he have a collar on him when he came to you? My name James McIntire was on it."

"He wore no collar when he came to us," replied Milly. "But there were marks of one on his neck, and the marks do sound alike."

"The thief had taken the collar off, then. I was up the Skeena on a hunting trip with McNicol, when I lost him. We had two Indians with us, and there were others about. We thought at the time some of them stole him."

"He is my dog and I want him!" McIntire went on firmly. "I will go into a hardware store and get a new collar and chain for him."

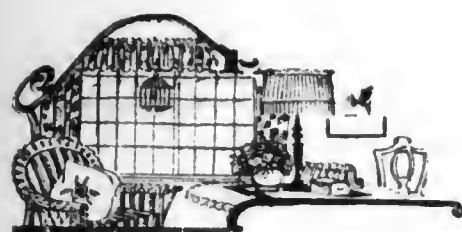
"He has been with us so long we have become much attached to him," Milly said. "But of course if he is your dog, you ought to have him."

There was little doubt that Lawyer McIntire was Mack's former master, but Mike, or Mack, himself seemed sadly divided in his allegiance. He evidently recognized McIntire, but his heart had clearly gone out to Milly; and when the new collar was put on his neck and his quondam owner started to lead him away, he first whined, then barked and afterwards struggled violently to break away. It affected Milly so much that she hastened on without looking back.

They supposed they had seen the last of Mike—but they had not. Two mornings later Mike was discovered at the foot of the stairs leading up to their lodgings, with a broken end of his new brass chain clamped fast in his collar. He had come back to find Milly. And there was a joyful scene when she appeared.

But Winthrop looked up McIntire's address and next morning called on him. "Your dog is now mine at last," he said. "I will have him and take care of him."

"I don't believe I will," James McIntire said rather sadly. "I've tried my best to win him back to me. I was mighty fond of him. But it is no use. His heart has gone from me. Tell your sister to keep him with my best wishes. He is plainly her dog now." (To be concluded.)



The Farm Home



This Is a Quilt-Scrap

THESE grow dull at times in an editor's office. Then someone stirs things up. This is the explanation of those paragraphs a few weeks ago in OUR HOME PAGE on the error of patchwork and the inadvisability of trying to patch them.

No market for quilts? No market for "tapestries of America"? O, tell us there is nowhere love of memories! The memories called by this entrancing patchwork, the dear small stitches that speak of personalities, that seem to fold human magnificence in the twist of their threads.

As for those so sensible dimity spreads and blankets, if you have ever spent a length of time in a hospital, you will be a weary of the everlasting, soulless efficiency of dimity and blanket coverlets.

Even so, who assembles a "period" room finds the humble bed coverlets and cushions for beds and chairs as necessary and inevitable as the hooked rugs for the floor, and the posy of everlasting on the old desk-top.

Recovering the markets with quilts and quilting is difficult because of so much variation in standards of offerings. Buyers have little chance to order with certainty of what they will get. Some quilts are use very coarse stitches. Some use designs that are skimpy of line. These uncertain-

ties can be met largely by estimating a quilt as a three-four or a pool quilt, with an approximate number of stitches to the inch is eight or twelve in average. Fillings too would need to be specified in the estimate of cost of labor; for the light blankets or, as they are sometimes called, winter sheets, are vastly easier to work than the sheets of wadding.

A small notice in some carefully chosen periodical, offering to submit the finished quilt, or to do custom work, should bring considerable response. In some sections, notably in the South, there are associations like the medieval guilds, whose members regularly take orders for quilts in these old time industries. Buyers may wish certain designs, certain goods, to be used, either as a matter of sentiment, or to fit in with an individualized plan of furnishing. The antique dealers could well show goods and take orders, as supplementing and making more attractive their offerings of furniture. An exhibit at roadside stands, too, would entice customers. For tourists are ever in search of the quaint and the typical of the regions through which they pass. M. M. Fetzer.

Note: Two delightful patterns for summer quilting are pictured here. You may secure them from the Quilt Pattern Service, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa. Patterns are fifteen cents each.

Resting Along the Way

HOW much health value is there in a vacation for the persons who are eternally fussing about that hard time it was getting ready to go, and tired it makes them to travel, how the hot suns play them out, and a hundred and one other things? The true vacation is now generally recognized as one of spirit as well as local surroundings.

The true vacation has many advantages in her daily round of duties which the working woman in the city misses. Fresh air is always hers for the taking. There are the bird songs which she hears in the city. It all depends upon herself. When she goes to a picnic, she picks the pens or berries for dinner she must make the work a genuine health exercise and not of drudgery. A Jean Straton Porter woman found solid joy in it for she would have taken in the brightness of earth and sky. From the hot sunshine she would have extracted the same sort of health for which people pay dollars when they get it in the mountains or at the seashore.

A vacation away from home is a fine thing. Take

one every chance you get. But there are so many things right at home that are ours for the taking. It is a pretty tough job from which we cannot get some joy if we only go after it. The kitchen porch may give us quite as much enjoyment when at work as the easy swing with nothing to do. The whirr of the hummingbird as it gathers sweets from the honeysuckle may be quite as restful as that of the automobile. And after all contentment in duty is a leading factor in real living.

Bessie L. Putnam.

The Bride's Three Meals

PERHAPS the new wife prides herself on her ability to make excellent angel food cake or just delights to stir up a fluffy omelet. No doubt she is going into a home of her own, and looks forward to the way her blue hiltie tea set will look on her little gate-leg table. She has pleasure thinking of her pale green cooking utensils as they will hang conveniently near her stove or sink. She has learned from Mother just how to use the pressure cooker, and the oven heat-regulator.

But even when a girl is fortunate enough to have learned to cook before marriage, she may still need to learn one point about the responsibility of home cooking. This point is that intelligent, sensible cooking and serving of meals is the most practical thing there is to home-making. It far eclipses the artistic arrangement of rooms or the making of clothes or the cleaning of the house, important as all these things may be.

Nor is the fancy cake-making even as important as the commonsense cooking of good fresh vegetables,—plenty of them served palatably. The bride will do well to learn food values, then put that knowledge into practice. She must know that the wholesome cooking of good meals pays quick dividends in keeping the family happy and well, their complexions rosy, and themselves cheerfully at work.

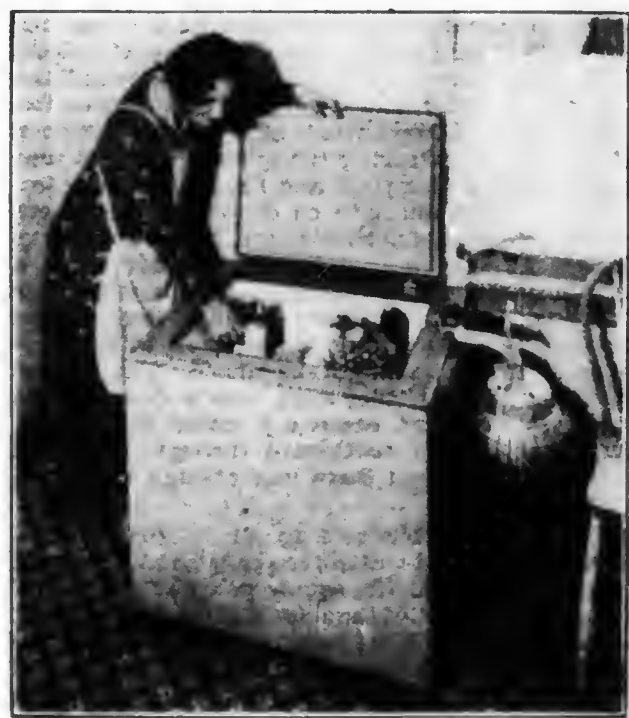
A steady sense of balance is needed to plan and cook consistently wholesome meals month in and month out, through the times of house-cleaning and through the times when there is illness in the family. But the sensible girl who delights in the joy of living will learn to keep that joy alive in her new home by cooking three square meals a day.

Marion Cossitt Brackin

Serve small enough portions of food to the child so that he can finish the whole amount.

Clothes should be damper for an ironing machine than for ironing by hand.

The quickest way to grate cheese is to put it through a meat chopper.



This home-maker has perfect refrigeration at a cost of but a few cents a day. Proper temperature is provided even on the hottest days to preserve food and make possible delicious cold salads, puddings and frozen desserts.

To Keep Food Cool

Our recent story on taking better care of our foods during hot weather has set so many of our readers to thinking and asking questions that we hasten to give you more information along the line of refrigeration for country families without electricity or any prospect of power. Read this story through, and write us for information if you are not entirely satisfied. Address letters to Home Department, Pennsylvania Farmer, 7301 Penn Avenue, Pittsburgh, Pa. Please enclose a stamped self-addressed envelope with your request.—G. S. S.

MAKING ice from heat at a cost of but two cents a day is one of the latest contributions of science for man's comfort, convenience and health. Today good refrigeration does not require gas or electricity and can be used anywhere.

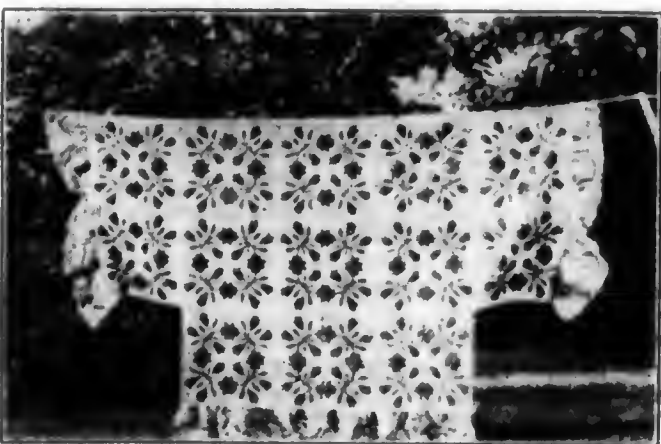
We quote the maker of one of the refrigerators which uses heat to freeze. "The operation of this new and unusual refrigerator is simple. There is nothing to get out of order, no moving parts and no odor. It is absolutely noiseless, requires no oiling. The refrigerator never needs replenishing. The freezing unit consists of two metal balloons joined together by a strong metal tube. These balloons contain a harmless liquid refrigerant hermetically sealed inside.

How It Works

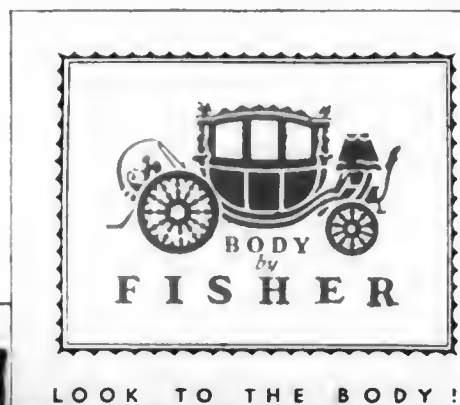
"Once every 24 hours it is necessary to lift the unit out of the cabinet, submerging the cold ball in a tub of water, allowing the hot ball to hang outside. The reservoir of the heating unit is filled with kerosene, the flame is lit and the heat soon forces the refrigerant into the cold ball. The unit is then placed back into the cabinet, and no further attention is necessary for 24 hours."

This system is ideal for use in the rural home and in other places where it is difficult or impossible to obtain electricity or ice. It keeps milk, meats, poultry, fish, etc. fresh for days, preserves butter, eggs and cheese indefinitely. The proper temperature is provided, even on the hottest days to supply delicious cold salads, enticing puddings, frozen desserts, refreshing ices. It makes ice-cubes for cooling drinks, and gives all the convenience of modern mechanical refrigeration without the use of electrical current.

Engineers have developed this refrigerator to fill a long-felt want for a low-priced mechanical refrigerator that is inexpensive to operate and which can be used on the farm and in small communities as well as in cities. In fact anywhere and without depending on electricity, natural or artificial gas or anything more complicated than an ordinary kerosene flame. Thousands of these refrigerators are in use in all parts of the world, including more than fifty foreign countries.



The Floral Wreath quilt is a lovely one in applique. Each block is fifteen inches square, and if made in careful color combination, is a prize-winner at every fair. This one uses two shades of green for leaves and stems, and soft iris and deeper iris for the two flowers. This pattern is often used for cushion covers.



Is your car a FISHER BODY CAR?



WE trust that you are not depriving yourself of Fisher Body quality. Quality of advanced design, quality of wood-and-steel construction, quality of finest craftsmanship and material—quality is the one and absolute rule in every Fisher process and particular. The result is that every Fisher Body car, in any field of price, unquestionably represents extra value and more for your money. The emblem, "Body by Fisher," and the emblems of General Motors cars also shown here, are the well-known symbols of a quality obtainable only in General Motors cars—the only cars equipped with Body by Fisher.

Check these points for extra body value in the car you are considering

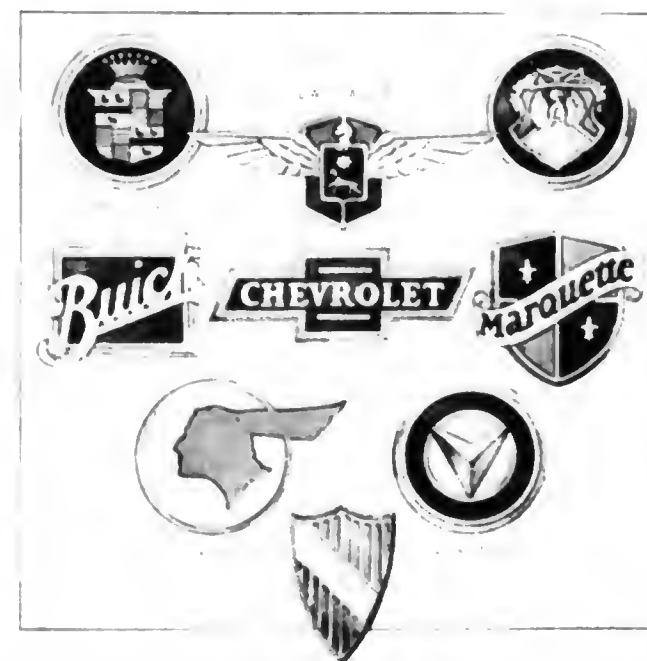
✓ **Wood-and-Steel Construction**—Fisher Bodies are constructed of selected seasoned hardwood, reinforced with powerful braces of malleable iron, drop-forged steel and pressed steel. This type of construction provides utmost strength and resilience, and is free from rumbles, rattles, and other body noises.

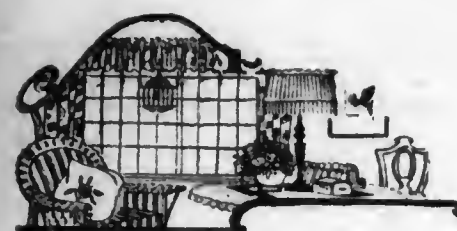
✓ **Roof Construction**—Fisher Body roofs are of strongest type construction; namely, the Fisher bow-and-slat type. The bows are cut to form—not steam bent—consequently retain their shape permanently. Specially notable is the steel roof-rail panel, which strengthens the roof materially and adds to the beauty of the car.

✓ **Clear Vision and Safety**—Every Fisher Body is equipped throughout with the highest quality genuine plate glass, affording clear and undistorted vision. The non-glare feature of the Fisher Vision and Ventilating Windshield is the latest important Fisher contribution to driving safety and car beauty.

✓ **Durable, Rich Upholstery**—All upholstery fabrics in Body by Fisher are much costlier than that accepted for ordinary body construction. They are extra fine in quality, and thoroughly tested to resist fading and wear. Fisher cushions and backs are designed with special care for riding and driving ease and for long-lasting durability. Form-fitting cushions over deep, resilient springs fit the contours of the human body providing maximum passenger comfort.

These are only a few of the many extra value features of Body by Fisher. All told, the special and exclusive advantages of Fisher Body assure much more value from every standpoint in the Fisher Body car.





The Farm Home



This Is a Quilt-Scrap

THINGS grow dull at times in an editor's office. Then someone stirs things up. This must be the explanation of those paragraphs a few weeks ago in OUR HOME PAGE on the error of quilted coverlets and the inadvisability of trying to market them.

No market for quilts? No market for "tapestries of America"? O, tell us there is nowhere love of memories! The memories called by this entrancing patchwork, the dear small stitches that speak of personalities, that seem to fold human magnetism in the twist of their threads.

As for those so sensible dimity spreads and blankets, if you have ever spent a length of time in a hospital you will be weary of the everlasting, soulless efficiency of dimity and blanket coverlets.

Everyone who assembles a "period" room finds the hand-quilted coverlets and cushions for beds and chairs as necessary and inevitable as the hooked rugs for the floor, and the posy of everlasting on the old desk-top.

Reading the markets with quilts and quilting is difficult because of so much variation in standards of offerings. Buyers have little chance to order with certainty of what they will get. Some quilters use very coarse stitches. Some use designs that are skimpy of line. These uncertainties can be met largely by estimating a quilt as a three-four or six-spool quilt, with an announced count of the approximate number of stitches to the inch, as eight or twelve in average. Fillings too would need to be specified in the estimate of cost of labor; for the light blankets or, as they are sometimes called, winter sheets, are vastly easier to work than the sheets of wadding.

A small notice in some carefully chosen periodical, offering to submit the finished quilt, or to do custom work, should bring considerable response. In some sections, notably in the South, there are associations like the medieval guilds, whose members regularly take orders for products in these old time industries. Buyers may wish certain designs, certain goods, to be used, either as a matter of sentiment, or to fit in with an individualized plan of furnishing. The antique dealers could well show goods and take orders, as supplementing and making more attractive their offerings of furniture. An exhibit at roadside stands, also, would entice customers. For tourists are ever in search of the quaint and the typical of the regions through which they pass. M. M. Fetzner.

Note:—Two delightful patterns for summer quilting are pictured here. You may secure them from the Quilt Pattern Service, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa. Patterns are fifteen cents each.

Resting Along the Way

HOW much health value is there in a vacation for the persons who are eternally fussing about what a hard time it was getting ready to go, how tired it makes them to travel, how the hot days play them out, and a hundred and one other things? The true vacation is now generally recognized as one of spirit as well as local surroundings.

The farm woman has many advantages in her daily round of duties which the working woman in the city misses. Fresh air is always hers for the taking. There are the bird songs which she hears or misses. It all depends upon herself. When she goes out to pick the peas or berries for dinner she may make the work a genuine health exercise or a bit of drudgery. A Jean Stratton Porter would have found solid joy in it for she would have taken in the brightness of earth and sky. From the hot sunshine she would have extracted the same rays of health for which people pay dollars when they get it in the mountains or at the seashore.

A vacation away from home is a fine thing. Take

one every chance you get. But there are so many fine things right at home that are ours for the taking. It is a pretty tough job from which we cannot get some joy if we only go after it. The kitchen porch may give us quite as much enjoyment when at work as the easy swing with nothing to do. The whirl of the hummingbird as it gathers sweets from the honeysuckle may be quite as restful as that of the automobile. And after all contentment in duty is a leading factor in real living.

Bessie L. Putnam.

The Bride's Three Meals

PERHAPS the new wife prides herself on her ability to make excellent angel food cake or just delights to stir up a fluffy omelet. No doubt; she is going into a home of her own, and looks forward to the way her blue lustre tea set will look on her little gate-leg table. She has pleasure thinking of her pale green cooking utensils as they will hang conveniently near her stove or sink. She has learned from Mother just how to use the pressure cooker, and the oven heat-regulator.

But even when a girl is fortunate enough to have learned to cook before marriage, she may still need to learn one point about the responsibility of home cooking. This point is that intelligent, sensible cooking and serving of meals is the most practical thing there is to home-making. It far eclipses the artistic arrangement of rooms or the making of clothes or the cleaning of the house, important as all these things may be.

Nor is the fancy cake-making even as important as the commonsense cooking of good fresh vegetables—plenty of them served palatably. The bride will do well to learn food values, then put that knowledge into practice. She must know that the wholesome cooking of good meals pays quick dividends in keeping the family happy and well, their complexions rosy, and themselves cheerfully at work.

A steady sense of balance is needed to plan and cook consistently wholesome meals month in and month out, through the times of house-cleaning and through the times when there is illness in the family. But the sensible girl who delights in the joy of living will learn to keep that joy alive in her new home by cooking three square meals a day.

Marion Cossitt Brackin

Serve small enough portions of food to the child so that he can finish the whole amount.

Clothes should be damper for an ironing machine than for ironing by hand.

The quickest way to grate cheese is to put it through a meat chopper.



The Floral Wreath quilt is a lovely one in applique. Each block is fifteen inches square, and if made in careful color combination, is a prize-winner at every fair. This one uses two shades of green for leaves and stems, and soft iris and deeper iris for the tiny flowers. This pattern is often used for cushion covers.



This home-maker has perfect refrigeration at a cost of but a few cents a day. Proper temperature is provided even on the hottest days to preserve food and make possible delicious cold salads, puddings and frozen desserts.

To Keep Food Cool

Our recent story on taking better care of our foods during hot weather has set so many of our readers to thinking and asking questions that we hasten to give you more information along the line of refrigeration for country folk without electricity or any prospect of power.

Read this story through, and write us for information if you are not entirely satisfied. Address letters to Home Department, Pennsylvania Farmer, 7301 Penn Avenue, Pittsburgh, Pa. Please enclose a stamped self-addressed envelope with your request.—G. S. S.

MAKING ice from heat at a cost of but two cents a day is one of the latest contributions of science for man's comfort, convenience and health. Today good refrigeration does not require gas or electricity and can be used anywhere.

We quote the maker of one of the refrigerators which uses heat to freeze. "The operation of this new and unusual refrigerator is simple. There is nothing to get out of order, no moving parts and no odor. It is absolutely noiseless, requires no oiling. The refrigerator never needs replenishing."

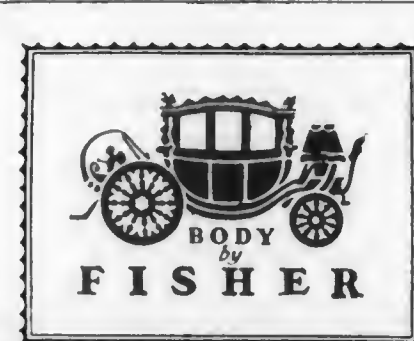
"The freezing unit consists of two metal balls joined together by a strong metal tube. These balls contain a harmless liquid refrigerant hermetically sealed inside."

How It Works

"Once every 24 hours it is necessary to lift the unit out of the cabinet, submerging the cold ball in a tub of water, allowing the hot ball to hang outside. The reservoir of the heating unit is filled with kerosene, the flame is lit and the heat soon forces the refrigerant into the cold ball. The unit is then placed back into the cabinet, and no further attention is necessary for 24 hours."

This system is ideal for use in the rural home and in other places where it is difficult or impossible to obtain electricity or ice. It keeps milk, meats, poultry, fish, etc. fresh for days, preserves butter, eggs and cheese indefinitely. The proper temperature is provided, even on the hottest days, to supply delicious cold salads, enticing puddings, frozen desserts, refreshing ices. It makes-ice-cubes for cooling drinks, and gives all the convenience of modern mechanical refrigeration without the use of electrical current.

Engineers have developed this refrigerator to fill a long-felt want for a low-priced mechanical refrigerator that is inexpensive to operate and which can be used on the farm and in small communities as well as in cities—in fact anywhere and without depending on electricity, natural or artificial gas, or anything more complicated than an ordinary kerosene flame. Thousands of these refrigerators are in use in all parts of the world, including more than fifty foreign countries.



LOOK TO THE BODY!



Is your car a FISHER BODY CAR?

WE trust that you are not depriving yourself of Fisher Body quality. Quality of advanced design, quality of wood-and-steel construction, quality of finest craftsmanship and material—quality is the one and absolute rule in every Fisher process and particular. The result is that every Fisher Body car, in any field of price, unquestionably represents extra value and more for your money.

The emblem, "Body by Fisher," and the emblems of General Motors cars also shown here, are the well-known symbols of a quality obtainable only in General Motors cars—the only cars equipped with Body by Fisher.

Check these points for extra body value in the car you are considering

✓ **Wood-and-Steel Construction**—Fisher Bodies are constructed of selected seasoned hardwood, reinforced with powerful braces of malleable iron, drop-forged steel and pressed steel. This type of construction provides utmost strength and resilience, and is free from rumbles, rattles, and other body noises.

✓ **Roof Construction**—Fisher Body roofs are of strongest type construction; namely, the Fisher bow-and-slat type. The bows are cut to form—not steam bent—consequently retain their shape permanently. Specially notable is the steel roof-rail panel, which strengthens the roof materially and adds to the beauty of the car.

✓ **Clear Vision and Safety**—Every Fisher Body is equipped throughout with the highest quality genuine plate glass, affording clear and undistorted vision. The non-glare feature of the Fisher Vision and Ventilating Windshield is the latest important Fisher contribution to driving safety and car beauty.

✓ **Durable, Rich Upholstery**—All upholstery fabrics in Body by Fisher are much costlier than that accepted for ordinary body construction. They are extra fine in quality, and thoroughly tested to resist fading and wear. Fisher cushions and backs are designed with special care for riding and driving ease and for long-lasting durability. Form-fitting cushions over deep, resilient springs fit the contours of the human body providing maximum passenger comfort.

These are only a few of the many extra value features of Body by Fisher. All told, the special and exclusive advantages of Fisher Body assure much more value from every standpoint in the Fisher Body car.



GENERAL MOTORS

"Let's play a round of golf" says MR. HACKETT

"Let's stay home and rest" says MR. HACKETT

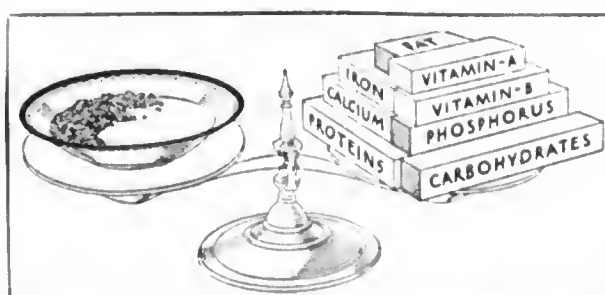


More vigor per spoonful... GRAPE-NUTS

In every one of us, two sides of our nature are struggling for supremacy. "Let's lick the world," says one side. "Sit down," says the other, "you can lick the world tomorrow."

To play hard and work hard—to greet each hour with zest and draw from it the utmost pleasure and profit—that's living! And that's what we want most. Vigor, energy to make life every day a glorious adventure.

Why don't we always have this vigor, and energy? What happens to us when we can't "get up steam"—when we haven't even enough initiative and enthusiasm to grasp the pleasures we long to enjoy? Look



GRAPE-NUTS MAKES THE SMALL BREAKFAST SAFE
A single serving of Grape-Nuts with cream provides more varied nourishment than many a hearty meal. Add Grape-Nuts to your breakfast.

for an answer in the food you eat. For food, day by day, must rebuild the body and recharge it with vital energy. And only the right kind of food can do the right kind of job!

If you want all-around health, exuberant energy and vitality, see to it that your food, every day, gives you all the building, energizing elements your body needs.

There is one food long known for the contribution it makes to building and fueling the body—a food which gives us a tremendous amount of energy in proportion to the amount eaten. This food is Grape-Nuts—purposely designed to give you the nourishment that produces healthful vigor, buoyant energy—and to give it to you in a form that is temptingly delicious.

Grape-Nuts is made of choice wheat and malted barley. It is abundant in dextrins, maltose and other carbohydrates, which are the chief producers of energy.

In addition Grape-Nuts provides vital elements often lacking in the modern diet—iron for the blood; phosphorus for teeth and bones; proteins for muscle and body-building; and the essential vitamin-B, a builder of appetite.

And Grape-Nuts invites eating. Its golden-brown kernels, tinged with purest malt sugar, are crisp and crunchy. Not only does this crispness add to deliciousness—it also encourages thorough chewing to help better digestion. And also gives to teeth and gums the brisk exercise they need to remain sound and healthy.

Start now to make breakfast build vital health and energy for you. Buy Grape-Nuts today for breakfast tomorrow! Your grocer sells Grape-Nuts—a Product of General Foods Corporation. Or send coupon below for free trial offer.

© 1930, G. F. Corp.

"There's a Reason..."



POSTUM COMPANY, Inc.,
Battle Creek, Mich.

Please send me free, a trial package of Grape-Nuts, and two free booklets—"Happier Days from Better Breakfasts," and also "Civilized Teeth and How to Prevent Them."

Name _____
Street _____
City _____ State _____
Fill in completely—print name and address

In Canada, address GENERAL FOODS, LIMITED, Sterling Tower,
Toronto 2, Ontario



IT'S WISE TO CHOOSE A SIX ...and the Chevrolet Six provides unusual ruggedness dependability and economy

Ability to keep on running dependably... day after day, month after month... at a minimum cost per mile—that is one outstanding quality of Chevrolet performance. That is one reason why more and more buyers of low-priced cars are finding it wise to choose a Chevrolet Six.

The very fact that Chevrolet is a Six means greater reliability. For the six-cylinder engine is, above all things, smooth! And six-cylinder smoothness not only assures greater comfort... but protects every part and unit of the car from the destructive effects of vibration. Engine, body and chassis all last longer as a result—and need fewer adjustments or repairs.

But six-cylinder design is only one factor of Chevrolet dependability. The banjo-type rear axle, for instance, is exceptionally large and rugged. The heavy channel steel frame provides support for the body throughout its entire length. The



The Coach, \$565, f. o. b. Flint factory

four-wheel brakes are big, powerful and durable. The beautiful Fisher bodies are built of selected hardwood-and-steel—the strongest, safest, most durable construction known.

And equally impressive, the new Chevrolet is just as economical as any automobile on the road today. It costs no more for gas—for oil—for upkeep. And on many service operations, Chevrolet's flat-rate charges are the lowest in the industry.

Near at hand—probably only a short drive away—is one of the 10,000 authorized Chevrolet dealers. Why not visit him today and see the new Chevrolet Six? Check over such features as the great 50-horsepower valve-in-head six-cylinder engine—the four long semi-elliptic springs and Lovejoy hydraulic shock absorbers—the many other modern features of extra value. Find out about the small down payment and easy terms on which you can own a Chevrolet Six.

CHEVROLET MOTOR COMPANY, DETROIT, MICHIGAN
Division of General Motors Corporation

CHEVROLET SIX

The Sport Roadster.....\$555
The Coach.....\$565
The Coupe.....\$565
The Sport Coupe.....\$635
The Club Sedan.....\$665
The Sedan.....\$675
The Special Sedan.....\$725
(6 wire wheels standard)

Roadster or Phaeton
\$495
Special equipment extra

The Sedan Delivery.....\$595
Light Delivery Chassis.....\$365
1½ Ton Chassis.....\$520
1½ Ton Chassis with Cab.....\$625
Roadster Delivery.....\$440
(Pick-up box extra)
Prices f. o. b. factory, Flint, Michigan

GOOD YEAR

Pathfinder



THE
IS RIGHT
THE
IS RIGHT

Here's a truck tire that can do a great job of hauling on your farm. Full ten ply—generous in size—marked with a name that instantly gives you its pedigree—GOODYEAR PATHFINDER.

Thousands of farmers can tell you its record of big mileage at low cost. They can tell you its husky strength and its road-gripping, rut-bucking traction. It has proved itself on the farm and on rural highways and byways.

It has proved itself, too, on thousands of other trucks, where tires must do a tough job of hauling at a low first cost.

You'll have no real idea what an outstanding value these Goodyear Pathfinders give you until you try them. Goodyear dealers know this—they know the strongest advertisement they can put out is the tire itself. That's why alert Goodyear dealers are now making a special drive for more farm users of Goodyear Pathfinder Truck Tires—by featuring them at prices so low that you'll have a mighty hard time finding any kind of truck tires for less. See them, price them, and you'll want them.

MORE TONS ARE HAULED ON
GOODYEAR TIRES THAN ON
ANY OTHER KIND



July 15, 1930.

PENNSYLVANIA FARMER

(35) 15



Perfectly Cool and Smart

No. 6897.—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. A 10-year size requires 1 1/2 yards of 35-inch material. Price 15c or two for 25c.

No. 6887.—Ladies' dress. Cut in six sizes: 31, 33, 35, 37, 39, 41 and 43 inches bust measure. The dress with sleeves, for a 34-inch size requires four yards of 35-inch material. Without sleeves it requires about 3 1/2 yards. The yoke and belt of contrasting material 1/2 yard, 39 inches wide, is required cut crosswise. Price 15c or two for 25c.

No. 6891.—Ladies' morning frock. Cut in eight sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 46-inch size requires 4 1/2 yards of 35-inch material. For contrasting material 1/2 yard is required cut crosswise. The width of the dress at the lower edge with fullness extended is 2 1/2 yards. Price 15c or two for 25c.

No. 6884.—Girls' and misses' sport costume. Cut in four sizes: 10, 12, 14 and 16 years. The costume for a 14-year size requires 3 1/2 yards of material 35 inches wide. Price 15c or two for 25c.

No. 6894.—Girls' dress. Cut in five sizes: 8, 10, 12, 14 and 16 years. A 12-year size requires 3 1/2 yards of material 35 inches wide. For contrasting material 1/2 yard is required 35 inches wide, cut crosswise. Price 15c or two for 25c.

No. 6898.—Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires 3 1/2 yards of 35-inch material. For contrasting material 1/2 yard 35 inches wide is required cut crosswise. The width of the dress at the lower edge with fullness extended is 2 1/2 yards. Price 15c or two for 25c.

No. 6781.—Ladies' dress. Cut in five

sizes: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 3 1/2 yards of 35-inch material. Price 15c or two for 25c.

No. 6763.—Child's rompers. Cut in four sizes: 6 months, 1, 2 and 3 years. A 2-year size requires 1 1/2 yards of material 32 inches wide. To finish with bias binding requires 2 1/2 yards 1 1/2 inches wide. Price 15c or two for 25c.

No. 6905.—Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. A 4-year size requires 1 1/2 yards of 35-inch material. The collar and cuffs of contrasting material requires 1/4 yard 35 inches wide, cut crosswise. Price 15c or two for 25c.

No. 6424.—Girls' dress. Cut in three sizes: 1, 2 and 3 years. A 2-year size requires 2 yards of material 35 inches wide or wider. To face collar trimming and sleeve bands with contrasting material will require 1-3 of a yard. Price 15c or two for 25c.

No. 6358.—Ladies' apron. Cut in one size—medium. To make the apron will require 1 1/2 yards of 36-inch material. To face pockets with contrasting material requires 1/4 yard 12 inches wide. For bias binding as illustrated 10 yards are required. Price 15c or two for 25c.

No. 6764.—Girls' undershirts. Cut in four sizes: 2, 4, 6 and 8 years. To make the set for a 2-year size requires 2 yards of 36-inch material. Price 15c or two for 25c.

HOW TO ORDER

Write plainly, giving pattern number and size. Address Pattern Department, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.

He Sells his Vegetables... by Telephone

A Bell System Advertisement

A FARMER who lives near Nashville, Tenn., finds his telephone a highly profitable aid in selling the produce from his eight-acre truck farm. Before every trip to town, he calls up his customers and receives orders for definite kinds and quantities of vegetables, to be delivered at specified times. He also finds out just what produce to hold in reserve for Saturday morning, his best market day. In this way he is able to avoid losses from spoiled vegetables, dispose of all his products and get the highest return that his truck farm has ever yielded.

The telephone also makes possible many profitable sales of livestock, grain, fruit and vegetables through co-operative marketing associations. It is always ready to run errands, make social engagements and summon help in cases of sickness or accident.

The modern farm home has a telephone that serves well, rain or shine.



Never before such SAVINGS

WARD'S nation-wide sale, now going on, is the greatest in our history. Every price greatly reduced. Over 2,000 bargains to select from. Look at your summer sale book or borrow your neighbor's. Get your share of these special offerings and enjoy a double saving.

YOU HAVE THIS BOOK Sale Ends Aug. 31st

MONTGOMERY WARD & CO.

Dr. Romig's Super Quality Chicks

Barned and White Rocks \$8.00 per 100
White Wyandottes \$9.00 per 100
Heavy Mixed \$7.00 per 100
100% Peppercorn (Red) \$10.00 per 100
F. C. Romig, Veterinarian, Beaver Springs, Pa.

Day Old Chicks—Pullets

Golden's Large Type \$8.00 per 100
Golden's Small Type \$7.00 per 100
Golden's Poultry Farm, Box 15, Vandalia, Ohio

In the Pennsylvania Farmer are Names—names

of advertised products. Time and again you see them. They are like old friends—to be trusted. Their names mean economy, full value and integrity.

Tell the manufacturer you saw their ad in Pennsylvania Farmer.

THE YOUNG PEOPLE

The Declaration of Independence

By Winifred Kohl, Pennsylvania

ONE summer day in the year 1776, there was a great stir in the city of Philadelphia. Congress was sitting in the hall of the State House. The streets were full of people, everybody seemed anxious, everybody wanted to know what was being done.

Men were talking about the war that was going on in England. They were crowding around the State House and listening to what was being said inside.

"Who is speaking?" asked one. "John Adams," was the answer. In a little while the question was asked again. "Who is speaking now?" "Dr. Franklin."

"Good! Let them follow his advice for he knows what is best." And then everybody was very still, for all wanted to hear what the great Dr. Franklin was saying.

After a while there was a stir among the listeners and those who were farthest away again asked, "Who is speaking now?"

Who Will Sign It?

"Thomas Jefferson of Virginia," was the answer. "It was he and Dr. Franklin who wrote it." "Wrote what?"

"Why, the Declaration of Independence, of course,—the thing they are talking about now."

A little later, some one said, "They are reading it and discussing each passage. They will be ready to sign it soon."

"But will they dare to sign it?" "Dare? These men will dare to do anything for the good of their country."

The truth is that for many days the wise and brave men who were then sitting in the hall had been talking about the acts of the King of England. For, up to that time, our country had belonged to England and was ruled by the English king.

One after another of these men told how the King and his counselors had sought to oppress the American people.

"He has cut off our trade with all parts of the world," said one.

"He has made us pay taxes to enrich himself and he doesn't allow us to say a word about making the country's laws," said another.

"He has sent his soldiers among us to burn our towns and kill our people," said a third.

"He has hired the Indians to make war upon us," said a fourth.

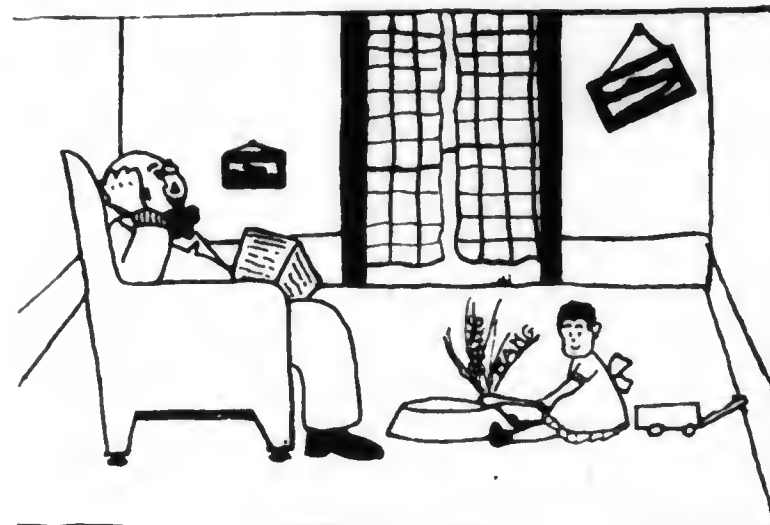
"He is a tyrant and unfit to be the ruler of a free people!" agreed they all.

Then Richard Henry Lee of Virginia offered a resolution declaring that, "these united colonies are, and of

right ought to be, free and independent states."

The resolution was adopted, and Jefferson, Adams and Franklin were appointed to write down all these statements in the form of a Declaration of Independence.

And it was to hear the reading of this declaration that the people on this hot July morning had gathered around the State House.



HOME, SWEET HOME
By Bruce Frankenberger

At length the bell in the high tower above the hall began to ring.

"It is done!" cried the people. "They have agreed to the Declaration of Independence!"

"Yes, most of the members have voted for it," said those nearest the door. "The King of England shall no longer rule over us. We are a free people."

AN APOLOGY AND A PROMISE

So many good Fourth of July contributions came in that it is necessary to have an overflow page this week. We knew you wouldn't want to miss these.

The next edition will bring you the stories of Pennsylvania's representatives at the Fourth National Fair H Club Camp. Young People's Editor.

GRANDFATHER'S FARM

My Grandfather's farm is a lovely place. In summer it's drenched in green. And the gray-brown rocks make a contrast most pleasing to be seen.

Not only in summer is it beautiful. In winter it's pretty, too. When the snow clings gently to the trees And the sky is a dull gray-blue.

The flying snowflakes are fairy tails; As they dance on airy feet. But it is not always snowflakes Sometimes it is rain and sleet.

That's my Grandfather's farm in winter. In spring it begins to green; And then, when the violets begin to bloom A lovelier place ne'er has been seen.

In summer the birds sing the sweetest. The humming bird feasts on the flowers. The grass in the fields is green as can be; The woods are the fairy queen's bowers.

In autumn the farm is so beautiful: The leaves turn yellow and red. When the goldenrod begins to bloom Why, I almost stand on my head. West Virginia. Vivian Staats.

Let's Play Games

Dot Menagerie

EACH person is given a lead pencil and paper and draws five dots. These are scattered far apart. Players then exchange papers and try to connect the dots by lines so as to make a wild animal. Prizes may be given for the best and the worst dot animal.

Hickey Picky Hokey Pokey

Players seated in circle. "It" in center points finger at some player and says "Hickey Picky Hokey

Pokey." Player must call out name of his next-door neighbor on right before "It" finishes word or exchange places with him. Seats should be changed often so players will learn names of several others.

I Love My Love

Players seated in circle. Leader starts with series of questions about "My Love" which must be answered according to the letters of the alphabet. The A's might run this way: "I love my love with an A, because he is Adorable. His name is Anthony and he lives in Andover." Next player takes letter B, etc. Each player



By Gertrude Wilson

TRY YOUR LUCK

Which letter is a part of the human anatomy?—I (eye). Which letter is an industrious insect?—B (bee). Which letter is a beverage?—T (tea). Which letter is a bird?—J (jay). Which letter is an exclamation?—O (oh). Which letter is a river in Scotland?—D (Dee). Which letter is a vegetable?—P (pea). Which letter is overbearing?—A (aye). Which letter is a body of water?—C (sea). Which letter is the longest in the alphabet?—L (a measure). Which letter is a tree?—U (yew). Which letter do we use when driving a horse?—G (gee). Which letters are prized by us all when on a banknote?—V and X (\$5 and \$10). Pennsylvania. Richard Stear.

THE SURPRISE

By Barbara Ellen Shoemaker

Bob was not a bad boy. But liked a bit of fun. That's the reason he bought himself a loud cap gun.

The glorious Fourth dawned clear. No cloud was in the sky. From each home and office A flag was flying high.

Bob's house was near the road. A thick hedge grew between. Behind the hedge Bob hid. Where he could not be seen.

A car came speeding by. Overhead, a bird sang: Then Bob pulled the trigger. It went off with a "bang."

Brakes screeched; a man got out. And with care looked around: He thought it a puncture. But every wheel was sound.

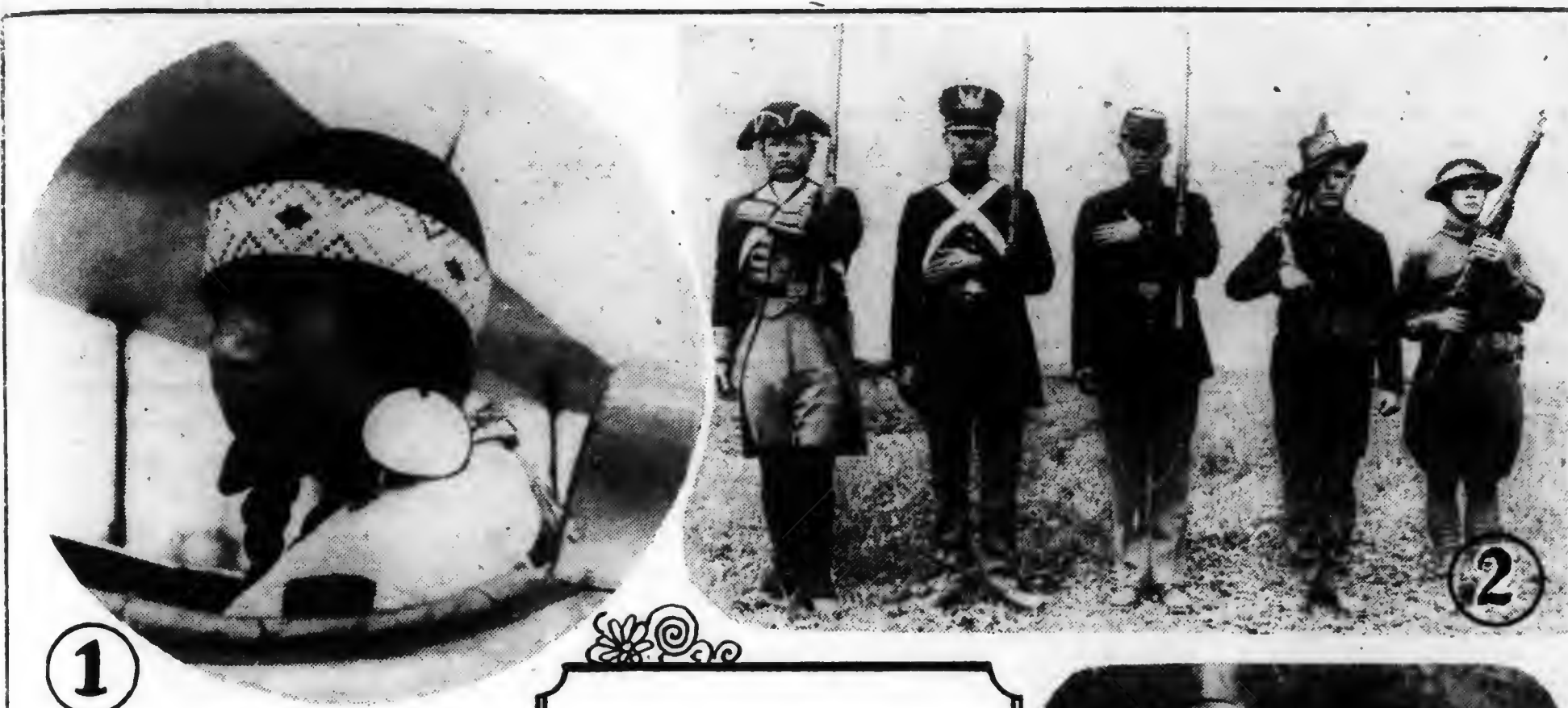
Little Folks' Corner



By Barbara Ellen Shoemaker, Pennsylvania

Try your colors on these roses and help the fairies. Ten prizes for the best coloring. Send your letter to Little Folks' Corner, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

PASSING EVENTS IN PICTURES



1. Portland, Ore.—Photo shows 20-year-old Mary Riddle, a full-blooded Ojibwa Indian girl who has completed an aviation course and is a full-fledged flier. Her real name is "Kus-de-ca."

2. Chicago, Ill.—An interesting feature of the Army Show to be held in Chicago soon is the different uniforms worn in respective wars. This photograph shows the "Port Arms" of Revolutionary War Days, 1776; Mexican, 1846; Civil, 1861; Spanish, 1898, and World War, 1917.

3. New York.—The venerable and wide-explored "City of New York" of Admiral Byrd's expedition. This ship housed radio station WFBT, which kept the outside world in touch with the doings of the Byrd party in the Antarctic.

4. Berlin.—An interpreter speaking through the new device introduced at the World Power Conference here. Representatives of many nations are present and at each desk is a head-phone set so that the delegate may "tune in" on his native language.

5. Sea Scout Paul Siple, center, with cap, who accompanied the Byrd expedition to the South Pole, relates his adventures to fellow scouts.

6. Berlin.—A new household device for keeping eggs fresh for a longer time. Each day the housewife turns the brackets holding the eggs, so that the egg yolks are shifted. This simple idea keeps the eggs fresh, 'tis said.



Frank Kestl, Milford Square, Pa.

FOR EVERY MOTOR ON YOUR FARM



chicks. Live delivery guaranteed. Postage paid.
HERBSTER'S POULTRY FARM, Box C, McClure, Pa.

GREEN FOREST POULTRY FARM

4. J. Amis, Top., East River, Box 1, Richmond, Va.



Diamond Corn Gluten Meal

[illegible]

MFRS., ALSO, OF BUFFALO CORN GLUTEN FEED

CRANE^{TRIPLE}SILOS^{WALL}

The New Milk Law

MYRON H. LOFFER, DeGraff, Ohio

So I repeat—tomorrow is a mys-
tery.

The Masterpiece of Cream Separator Design and Efficiency



**MODERN
MILK
COOLING**
for the DAIRY



HOT weather means little to the dairyman with an ESCO Milk Cooling Cabinet. He gets the highest premiums for quickly cooled milk, keeps bacteria down and reduces labor and costs. He merely plunges the cans of milk into the ice-cold water in the cabinet and leaves them there until delivery time.

Model E (electrically equipped) cools milk quickly to below 50 degrees. Automatic and efficient.

Model O is the same cabinet but for use with ice. Can be equipped with Esco Cooling Coil for electric cooling at any time.

See your Power Company, Electric Refrigeration Dealer or write direct for facts and figures.

ESCO CABINET CO.,
WEST CHESTER,
PENNA.



DAIRY CATTLE

5 JERSEY BULL CALVES

steers, 40 Angus heifers bred to reg bull; 45

Deep Tillage

By EDWARD G. STONER

THE deep tillage system of preparing seed beds is attracting a great deal of attention throughout Pennsylvania. One farm machinery dealer reports that during the winter months of 1929-30, nearly three hundred farmers visited his warehouse to inspect and secure further information concerning these implements. A keen interest in the demonstration of them was shown by the several thousand farmers attending the convention and machinery demonstration held at State College by the Pennsylvania Potato Growers' Association, August 20 to 22, 1929.

A set of deep tillage implements consists of a deep working chisel or subsoiler, or—as Dr. Nixon calls it, a "jostler"—and a heavy cover crop disk, with disks at least 22 inches in diameter, and with approximately nine-inch spacings.

The chisel or subsoiler is used for breaking up the ground to a depth of from ten to eighteen inches. While breaking up the soil to this depth, it does not turn it over. The top soil, richest in decayed vegetation, is left on top, where seeds germinate and grow best.

To Conserve Moisture

The breaking up of the hard layers of soil below the surface, frequently called plow pan or plow sole, permits moisture to seep down naturally and rapidly for safe storage away from sun and wind. This moisture is stored away to help crops throughout disastrous dry seasons such as was experienced throughout Pennsylvania in 1929.

Years of plowing form a hard pan at the bottom of the plow depth. Fine particles of soil are being continually carried down through by water, by continued plowing and stirring the top soil, increasing the hard strata underneath until it becomes so thick and hard that rain will not readily pass through it.

Where this plow pan exists, during a prolonged rainfall or during an excessively heavy shower, the surface soil becomes excessively saturated and puddles. Then erosion or washing starts, and here, on the hilly Pennsylvania farms, this is the most destructive enemy of the farmer, because the richest plant food is washed away by it.

Land can be deep-tilled to best advantage at the driest season of the year. The dryer the land, the more it will be cracked and broken up by the deep tillage implements. The dry season in the fall is an ideal time for breaking up the land that is to be planted the following spring.

Vegetation Chopped Up

The cover crop disk mixes the top soil. Vegetation grown as a soil builder must be properly rotted before roots can make use of this material. Cover crops or heavy sod must either

be plowed under or disked into the soil. The cover crop disk does not turn vegetation into the land in large mats. It is chopped up thoroughly and mixed well into the top eight inches of soil, instead of burying it. Two—or under bad conditions—possibly three times over the ground with this heavy cover crop disk chops, stirs and mixes this vegetation thoroughly into the top soil. It is cut up fine and soil particles thoroughly surround each little piece and it is thoroughly rotted by the beneficial class of bacteria to become soluble plant food.

Thorough mixing of the soil with the vegetation gives the land more uniform air spaces and makes it more spongy. It holds water better, is easier to work and maintains a warmer temperature. The soil, being well mixed with vegetation, supplies organic matter to serve as a soil binder to prevent washing or erosion. It is rotted more rapidly and evenly and no mats of green stuff, such as are found under plow furrows, will catch cultivator teeth, weeders, etc.

Water Softener

WHERE the water supply is hard, due to lime or magnesium, a water softener can be installed to alleviate this difficulty. Some of these water softeners require at least 15 pounds of water pressure per square inch to work successfully. The general run of air pressure or pneumatic water systems operate at about 30 pounds pressure per square inch which has ample pressure. One would only run the water which is used in the bath, kitchen and laundry through the softener. For sprinkling the lawn and garden, washing the car, drinking, etc., the water is taken directly from the pipe line rather than the softener.

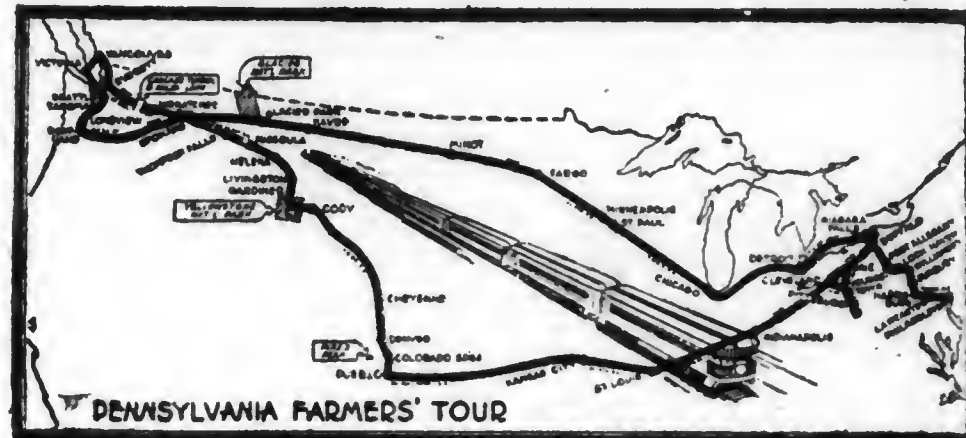
If the water supply comes from a spring on the hillside it would have to have a height above the house of about 35 feet. It requires a 2.3 foot head to develop a pressure of one pound per square inch. R. V. B.

Cause of Overheating

A FEW days ago I passed a friend using a converted tractor to pull an eight-foot power lawn mower for mowing a golf course. In spite of the fact that the weather was cool and he had only a light two-horse load, the engine was steaming away at a great rate and he told me he had used up several pails of water. I raised the hood and looked in.

"Don't believe your fan is running more than half speed," I told him. I stopped the engine and tried the fan and sure enough it could be turned very easily. I adjusted the tightener until the fan gave some resistance to turning, and told him to try it again. The next time I saw him he said the outfit was working fine. I. W. D.

The Cost is LOW So All can GO On This Wonderful Trip



On the

PENNSYLVANIA FARMER TOUR

to Glacier National Park, the Pacific Northwest and Yellowstone

Of course you are going on the Pennsylvania Farmer Tour to the Pacific Northwest, Yellowstone and Colorado Rockies. And many others from right here in your own state and county are also getting ready for this wonderful sight-seeing trip. It's the vacation you have dreamed about—and offered at unusually low cost. Remember the date—July 26 to August 10—the time of year when you can best get away.

One low price pays for everything—You can almost leave your pocket-book at home. The entire cost is covered by a lump sum which includes rail and Pullman fares, meals in dining cars and hotels, motor and steamship fares, lodging, sight-seeing and national park tours. No extra tickets to buy, no tips to pay, no hotel or baggage worries.

You visit the last home of a vanishing race—the reservation of the Blackfeet Indians—Glacier National Park with its riot of color and awe-inspiring greatness. You travel on the Pacific Ocean by C. P. Steamer from Vancouver to Seattle, stopping off at Victoria. You gain intimate knowledge of the Northwest's cities, and view the scenic grandeur of famous Yellowstone National Park.

LAST CHANCE—You cannot afford to wait longer about deciding to go. Tour starts July 26! Your friends and neighbors are going. Go with them on this glorious educational, sight-seeing low cost tour.

MAIL COUPON today for illustrated descriptive booklet giving complete details and low rates.

DIRECTOR OF TOURS.

Pennsylvania Farmer,
7301 Penn Ave., Pittsburgh, Penn'a.

Please mail me at once your free book telling all about your tour to the Pacific Northwest, Yellowstone and Colorado Rockies.

Name

Address

R.F.D. State



Jostler in operation on farm of John L. Blair, Greene county, Pennsylvania.

PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

July 19, 1930



Philadelphia

Pittsburgh

Harrisburg

Farm Facts and Fancies

B. ALVA AGEL

... You get maximum profits in terms of cash income and improved herd or flock by using Park & Pollard feeds.

*With pasture feeding use
Herd Health 16% or
Park & Pollard Fitting Ration.*

Complete List of Park & Pollard Feeds

Poultry Feeds: Lay or Best Dry Mash - Red Ribbon Scratch - Growing Feed - Intermediate Chick Feed - P & P Chick Scratch - P & P Chick Starter - Dairy Rations: Overall 24% - Milk-Maid 24% - Hot-It-Milk 26% - Herd Health 16% - Milk-Maid Calf Meal - Other Feeds: P & P Stock Feed - Bison Stock Feed - Go-Tink Pig and Hog Ration - Pigeon Feed - P & P Horse Feed - Poca-hontas Table Corn Meal.

SOIL fertility is a field of research that has produced immense returns. In recent years the reasoning has been that if research could do so much for production it might be equally valuable in the disposition of what was produced. Money has been liberally appropriated toward this end.

All of us will agree that good has been accomplished, but as yet there is nothing comparable to the definite effects on production that soil science has brought. Beyond doubt we have expected too much. When an excess is produced there is necessarily a surplus that is not wanted, and warnings to reduce acreage often are ignored.

The Human Element

Our marketing scientists are up against another difficulty that a few do not seem to recognize. They undertake to find what they believe to be the right way to handle a product but do not take sufficiently into account the human element in their problem. No way is a right way that is impracticable, and the fact that it does not appeal at all to the people of a community makes it impracticable. Theoretically it may be good enough, but if it lacks ability to get itself accepted, it is worth nothing. The soil scientist deals with material that has no human nature in it, and he can count on what it will do, but the marketing scientist needs to know people as thoroughly as he does markets.

A few years ago many were rushing to Denmark to get marketing plans that could be recommended to us. Fine as are the methods of the Danes for themselves, we hear less of them now since we have come to know how different local conditions are. Their special markets and close business, social and racial ties make methods possible that do not meet the wide need of a huge territory. Switzerland's Peasant Union is a great boon to that country, but it could not mean much to our nation. We are as we are and, deplorable as that may seem to one who evolves the theoretically right scheme of distribution, any method of marketing must take it into account.

Out of Experience

In the past our improvements in methods of distribution have come chiefly out of experience. When the first housewife had more eggs than the family needed, and wished she had coffee to substitute for herbs, bark, etc., and when she found that she could take the eggs to some one who had brought in a lot of coffee and would make an exchange, she made a notable advance step in distribution. Not only that, but she brought the coffee back home with her, and that is better than some do when using modern methods.

Cutting and Trying

And out of experience have been built up present organizations for marketing. But some traders grow so rich that producers become convinced that they did not get their share, and cooperative selling and buying came in for trial, and there is a record of big successes. I recount this to say that no one could sit in a mental laboratory and evolve plans surely dependable, but the research that made distribution what it is today was largely a groping through experience—a cutting and trying to see what plan would fit into the mental habits as well as the needs of any one group of producers, big or little.

What Will Work

Even as our marketing scientists are, I doubt whether they can decide through any course of reasoning that this method will work and should have the stamp of approval, and that the other will not work. Conditions are

so variable and people are so variable that the answer to a problem comes today through experience to each group of producers very much as it always has. We shall have instances of a group really helping itself by a method that seems poor to others and of another falling down when copying exactly what is used successfully in some other part of the country.

The vast amount of data being assembled in marketing has a lot of value, and it has a big education force, and the counsel given has much influence, but probably the marketing of nine-tenths of all we produce will continue to be according to methods that are worked out through the producers.

Peppery Old Age

He was a man far into the eighties, if not through them, and yet pretty rugged in appearance. I was standing in the market, wondering how a lot of oranges could be so poor in appearance and simultaneously so high in price, and ordering some stuff from the clerk, when the old man came in and wanted the clerk to tell him how to find a certain address. When he found the clerk didn't know, he flew to pieces, saying everybody gave him the same answer, and adding a plenty to give his anger a chance. I unwisely made a comment and he turned quickly on me, saying I had bitten in, he had not asked me anything, didn't like me and wanted nothing to do with me.

The manager decided to take a hand, told him he knew about where the house was, and that a car would have to be taken. Then he boiled over, saying a conductor had misdirected him and he would not use any street car. Angry all through, he passed me on the way to the door, and I took another risk, offering to take him in my car to hunt the place as he was over a mile from it. In he got, and then he was puzzled enough. He knew all the world was wrong, and yet he was riding in an automobile toward his supposed destination.

The thing to do was to find some reason. First, he asked if I was not going in his direction anyway, and I told him I lived the other way. He studied that over, and then asked whether I did not belong to some service organization. I told him I did not, but was going on my own. That beat him because he knew it was a rotten world. About once a minute he announced his bewilderment but held closely to his doctrine of the world's depravity. When we came near the place where I hoped to find his short street I stopped to ask a young girl whether she could direct us, and she said she did not know the street, being a stranger. Then the old man bubbled over again, having more proof of the world's contrariness. The girl had no business being a stranger.

Within two blocks we found the street and house where he had left his sachel. It was moving day with him, and I reckon that came often. Probably he is now wondering what sort of a confidence game I was running. Poor, belated traveler to a far country! I got more than the gas cost in the determination that if ever I grew older I would not grow any grouzier.

To Kill Quack Grass

DURING the winter I noticed an article on destroying quack grass. I have tried several methods with little success till I used the following:

Cut the grass the last week in June (this is Crawford county, Pa.) and as soon as it is dry burn it on the ground. Repeat this in August and the following June and August. If carefully done it will exterminate quack grass. It is of course too late for the first cutting this year, but this is something to try next year.

W. C. Himebaugh

NEWS for You at Your OLIVER DEALER'S

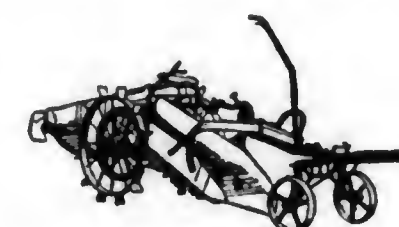
And Remember—for fall work Every Oliver Dealer has

new and up-to-date farm tools that will lower the cost of producing every crop that you raise on your farm.



The Oliver Spreader

In the new Oliver Superior Spreaders, six steel springs—two front, four rear—mounted beneath the straight steel sill. These springs absorb the shock, saving the frame and box from wrenching and twisting, keeping the machinery in alignment, lengthening the life, improving the work. It has also the widest feed range—4 to 28 loads per acre.



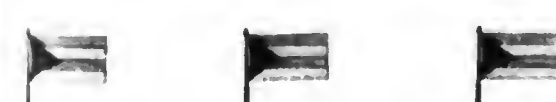
The Potato Digger

From the parent line of potato tools comes the Oliver Potato Digger, built for the work of rooting the potatoes out of the soil. The heat-treated steel digger plow penetrates in any soil. The long elevator shakes out the dirt. Built 80% of forged steel, it stands up to this tearing, wearing work, and the Oliver Lock Links will not unhook in stony soil.

Oliver National News Month July 15—August 15

Whether your crop is wheat, oats, corn, cotton, dairy, hogs or steers, there's news for you in the Oliver National News Month at your Oliver Dealer's. Check the coupon and take this paper to your Oliver Dealer's—he's got the news or send it to Oliver at the address given below and the news you want will be on its way in 24 hours after the coupon is received.

SEE YOUR OLIVER DEALER

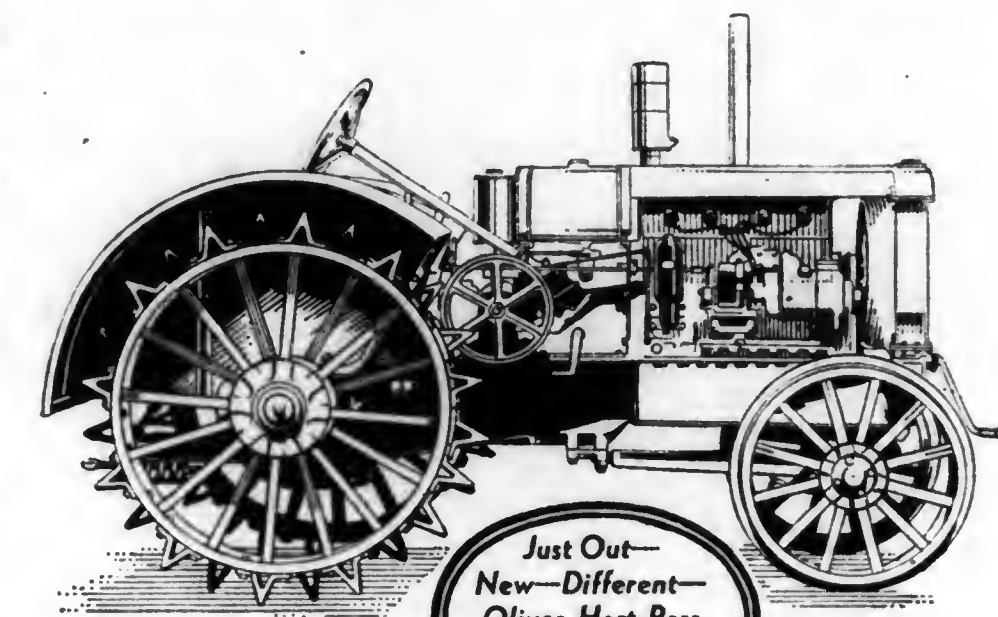


OLIVER FARM EQUIPMENT SALES COMPANY
Hartburg, Pa., Rochester, N. Y., Syracuse, N. Y.
Please send me the news on the tool or tools I have checked below:

Name.....
R. D. P. O. State

Number of acres farmed..... Principal Crop

☐ Grain Drills ☐ Tractor Gang Plows ☐ Manure Spreaders
☐ Corn Picker-Harrows ☐ Potato Diggers ☐ Thrashers



Just Out—
New—Different—
Oliver Hart-Parr
2-3 Plow
Tractor

NEWS Awaits You—Startling—Profitable News

Oliver's Hart-Parr Tractor Division announces to you a new—different—outstanding line of Tractors—a new answer to today's problem of lowering farm production costs.

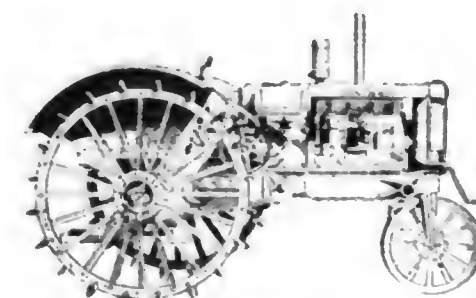
The Oliver Hart-Parr 3-5 Plow Tractor
The Oliver Hart-Parr 2-3 Plow Tractor
The Oliver Hart-Parr Row Crop Tractor

Oliver's News to You Features—

A New Interpretation of Power
A New Simplicity of Construction
A New Conception of Accessibility
A New Standard of Engine Efficiency
A New Type of Cooling
A New Type of Lubrication
A New Type of Carburetion
A New Ease of Steering
A New Ease of Handling
A New Standard of Economy
A New Standard of Delivered Drawbar Power

A New Standard of Low Cost Operation
A New Standard of Great Power in Light Weight
A New Standard of Tractor Beauty
A New Standard of Operator's Comfort
A New and Profitable Investment for You

News—profitable news on these startling advances in tractor design and operation awaits you at your Oliver Dealer's. See him today for this news story.



The Oliver Hart-Parr Row Crop



OLIVER FARM EQUIPMENT SALES COMPANY
Hartburg, Pa., Rochester, N. Y., Syracuse, N. Y.
Please send me the news on the Oliver Hart-Parr Tractor I have checked:

Name.....
R. D. P. O. State

Number of acres farmed..... Principal Crop

☐ 3-5 Plow Tractor ☐ 2-3 Plow Tractor ☐ Row Crop Tractor

OLIVER NATIONAL NEWS MONTH JULY 15—AUGUST 15

Leaving a Hideous Trail of Waste . . .

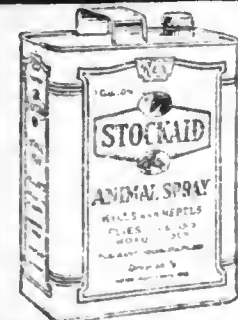
These foul, contaminating insects are bound to invade your home. Be prepared to fight them. Have FLY-TOX handy. Pure, clean, stainless, fragrant. It is the scientific insecticide developed at Mellon Institute of Industrial Research by Rex Research Fellowship.

THE FEARFUL



FLY-TOX

KILLS THEM ALL
Absolutely Harmless to People and Animals

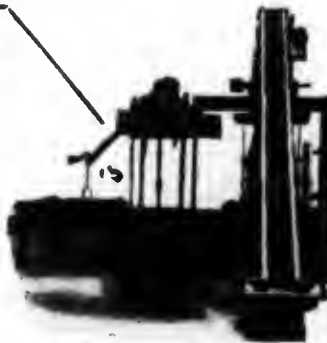


Protection for Animals, too . . .
Use STOCKAID on your livestock. Another scientific insecticide. Repels and kills Flies, Mosquitoes, Fleas and Lice. Harmless to people and animals. Will not stain. Has pleasant odor. Will not irritate the skin. Will not clog sprayer. Used in the largest dairy barns in the country. Fully guaranteed.

CIDER! How Profitable to Press it from Culls and Second Grade Apples

Many people are making big profits by operating a Farquhar Cider Press. Because the press is built in sizes suitable for Roadside Marketing, the Individual Orchardist and Custom Pressing. It is easily operated, exerts heavy pressure and gets better and richer cider.

Press Supplies, Hammer Type Pulper, Rotary Cider Strainer, Quick Drain Racks, etc.
Ask for Bulletin on Roadside Press and Engines, Badders, Sawmills, Thrashers, Hay Balers and Farm Machinery.
A. B. FARQUHAR CO., Limited Box 146, York, Pa.



We Can Save You Money

Send for particulars about Compensation and Automobile Insurance. We protect the employer. 24 hours in the day in this company.
PENNA. THRESHMEN and FARMERS' MUTUAL CASUALTY INSURANCE COMPANY
311 Mechanics Trust Building Harrisburg, Penna.

SAVE AND BUY
Quick Acting
Fine as Flour
Low Cost

ALBA MARL

Nature's Soil Remedy
All Available
Granulated For
Easy Sowing

WRITE FOR GUARANTEED DELIVERED PRICES TO . . .
ALBA MARL LIME COMPANY, CHARLESTOWN, W. VA.

Get Rid of CANADA THISTLES

The Little Wonder Weed Exterminator will positively destroy them.

A spraying solution (not a chlorate); positively kills the weed; will not ruin the soil nor kill cattle. Write for free illustrated booklet.

REBER CHEMICAL COMPANY
Reading, Pa.

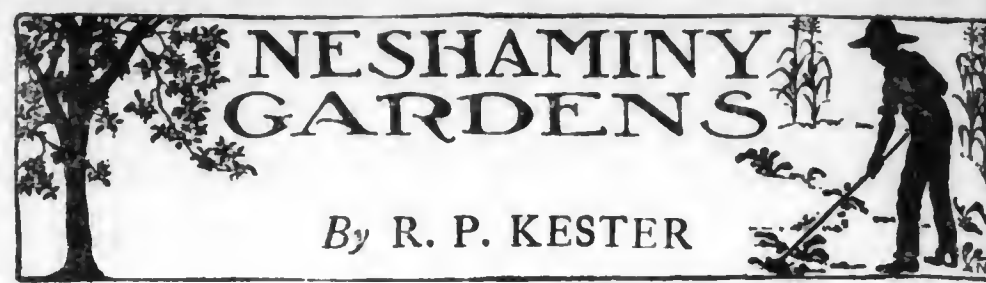
METAL ROOFING

WE PAY THE FREIGHT
LEADCLAD KEYSTONE COPPER BEARING
WIRE FENCE APEX-GALVANIZED ROOFING
AND BARS WIRE

CONSUMERS MFG. & SUPPLY CO.
Dept. F, Mountsville, W. Va.

Many of our advertisers

offer to send booklets and other descriptive material upon request. You will profit by asking for them and reading them with care. Make sure that the product advertised exactly fits your need. Mention the fact that you saw their advertisement in the PENNSYLVANIA FARMER.



FIFTY years ago rural people were not "on the go" as much as they are today, but they got together more frequently. The visiting radius was only about five or six miles in any given direction. Within that area everybody knew everybody else, and there was the utmost feeling of comradeship and good-will. It was the rank and file who did the "cutting" if an individual, or a family, showed signs of feeling "up-ity" or of having bluer blood than others.

I am well aware that conditions and circumstances make habit and custom to a large extent. I am not sure that the people of that and former times were inherently better than we of today, but their more circumscribed lives forced them into closer association. The driving distance for a visit, or to attend a meeting, was limited to a few miles. The chores had to be done night and morning. Also, the thoughtful farmer would not force his horses to do heavy extra duty by driving them long distances after working them ten hours a day in the fields, or even longer when hauling back or lumber.

Knew Each Other Well

Since human beings are more or less gregarious, demanding the company of their fellowmen at least occasionally, these limitations of travel forced the people of each locality to associate with each other almost exclusively. For this reason marriages were nearly always between those who lived near and who had known each other all their lives. Possibly this accounts for the small number of divorces in earlier times. Of course there were some loosely drawn social lines made by religious denominations, fraternal organizations, party politics, etc., but in the main everybody was invited and welcomed to a community affair.

The last paragraph needs the mention of an exception or two. In my old neighborhood were two pastimes which were taboo when I was a youngster. These were card playing and dancing. Although these have become almost universal popular recreations, there as well as elsewhere, only a few families were "careless" enough of their young people's welfare to allow them to engage in these "degrading activities."

I have no doubt it was a country-bred poet who wrote:

"When we know each other better,
We shall love each other more."

For surely country people did know each other, and their actions indicated that they had a feeling that was at least akin to love. Any service that could be performed for a neighbor, or any accommodation that could be given, was cheerfully done. A money compensation for a "neighborly act" was spurned, and was seldom offered.

Ready to Help

In times of sickness or other calamity neighbors felt it their duty to aid the unfortunate in any way possible. Paid or professional nurses were unknown and undesired. It was thought the members of the family and the neighbors were the logical persons to take care of the sick. They would not have permitted a stranger to "mess around" a patient. Such was the family and community feeling in frontier places a half century ago.

The people of a community patrolled themselves and "sat up" with a patient who required night attendance. The pairs took turns, and continued as long as the sick neighbor was in bed. A death in a family caused a cessation or slackening of work in the entire neighborhood for a day or two while all did some service for the be-

reaved—carrying the message to others, arranging the premises for the funeral, digging the grave, fixing up and washing the buggies and wagons, while the women gathered and spent a day in cleaning and baking for the funeral.

When I was a small boy an epidemic of diphtheria broke out in our neighborhood one fall. In our home we children, five in number, all took it within a few days, three dying inside of two weeks. Under the circumstances father and mother were occupied day and night. The crops of buckwheat and corn were ready to cut and harvest and other work was pushing. Nothing about the farm was being done. All thought was on the sick and dying children. But here the old-time neighborliness showed itself. One morning father looked out and saw gangs of men at work cutting the buckwheat and corn. Another crew was in the barnyard hauling out manure for the wheat crop. In fact, everything that needed doing was being done. When the work was finished the neighbors went home and it was a closed incident.

Progress in Disease Control

In no phase of life is there a better measure of the progress we have made in the last 50 years than in medicine, surgery and the control of disease. The diseases dreaded by mothers because they were so fatal to their little tots—diphtheria, scarlet fever, croup and cholera infantum—have, in the main, been mastered. No mother ever understood why God reached down and took her little one, but the belief that He did was the only solace she had, since all that she and the doctor could do to prevent it was all too often in vain. Mumps, measles, chickenpox, etc., were known to be communicable in some unknown way, but the germ theory was not known.

The old family doctor who ministered faithfully and to the best of his ability in the epidemic mentioned above carried his office key in his pocket and used it to hold down the tongues of his patients so that he could examine their throats. Every one, sick and well, was examined as he went from house to house, and that key was never sterilized. But the old doctor was not to blame. He did the best he knew. Human knowledge had not progressed that far.

Roughage for Clay Soil

CLAY land is like the human digestion—it does best on a bulky ration. It's not possible to improve a bad digestion in a noticeable way by a single bulky meal, but when the bulky meals have been eaten for weeks and for months the desired effects appear.

Right at hand in this neighborhood is a field mostly clay on which a lot of manure was plowed down this spring, then fertilizer was drilled both broadcast and in the corn planter. In a dry season it has taken weeks and weeks for that corn to get started off in a way one would expect. That clay land was manure hungry. It hadn't the capacity to digest right "off the handle" that big meal of humus.

I know an agricultural chemist who claims that we can farm without straw and stalks and humus, just buy plant food. Well, the world can live without corn-cob pipes too, but it doesn't! We use commercial fertilizer several times a year, but when it comes to corn on clay land the clay will assimilate the purchased plant food with more kick if it has been accustomed to biennial or triennial square meals of litter and vegetable trash.

H. D.

More Readers on Farms in Pennsylvania than Any Other Farm Paper

President Arthur Capper
Vice-President T. D. Harman
Vice-President Geo. M. Slocum
Editor-in-Chief E. S. Bayard
Manager Neff Lelag

PENNSYLVANIA FARMER

Published Weekly Established 1877

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of Mar. 3, 1879.
PUBLISHED EVERY SATURDAY BY

CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., July 19, 1930

No. 3

The Drama League of Chester County, Penn'a

By ELLEN S. BRINTON

FOR many years in the urban communities there has been an increasing interest in amateur dramatics, so much that outside of a few large cities professional actors are seldom seen. This has been termed "The Little Theatre movement." Sometimes the clubs become locally quite famous; one or two of the performers may be partly paid and very often a professional director is engaged on full time. The Playground and Recreation Association of America have two drama specialists on their staff whose particular job is to encourage and aid amateur plays.

Now the Little Theatre movement has reached the rural sections. On the farms, along with questions of the price of milk and canning beans and conquering the Japanese beetle such subjects as "make-up" and "stage-lighting" are discussed. No one is surprised when a county paper carries a first page heading in letters an inch high announcing that a local Grange has won a drama contest. As an example of what has been done in developing local talent to present worth-while plays the story of the Chester County Drama League may be of interest.

As Much Fun as the Audience

For years the community clubs and especially the Granges, over Chester county, Pennsylvania, have encouraged dramatics. Those who participated discovered that they had as much fun practicing and rehearsing as the audience had in the final presentation of the play. Amateur dramatics seemed to be a form of entertainment that never failed to arouse interest on the part of both performers and listeners. Instead of going out of fashion with passing years the interest grew. In the spring of 1929 eleven of the county groups put on a competitive drama tournament, showing at

the Kennett Square and West Chester Women's Club Granges. The groups that took part were high school students, Junior Century Club members, Granges, and a team from Lincoln University, a well known college for colored men. The Brandywine and Kimberlin Granges tied for first honors, the plays being carefully scored by selected judges. Public interest was keen and audiences showed their enthusiasm by turning out well for all seven performances.

This last season, 1929-1930, twenty active player groups took part in a year-round county program for better amateur theatricals. League meetings were held to discuss the technique of acting and play production, with an average of 55 persons present. In April another tournament was held, with ten of the more proficient groups taking part. One act plays were presented at the West Chester Century Club on four successive nights with over 1,000 persons attending. Those taking part were women's clubs, day and night schools over the county, nurses' teams from two hospitals and Granges. Kimberlin Grange won first prize. Not only the actions of the players were considered in scoring, but costumes, lighting, scenery and stage management.

the smallest hamlet is vitally touched."

Some months back the program of the county committee came to the attention of the Carnegie Corporation, and a grant was made providing for a trained worker to make an experiment in Chester county. As a result, the county took over the worker to head up a central office for the various activities; and as a further piece of experimentation in community welfare the Carnegie Corporation is making an allotment of \$5,000 on condition that the community raise some \$15,000 more. This is not considered excessive in a county of 126,000 population.

The County Program

Part of this money is direct appropriation from the county commissioners, part is club dues paid into established associations, part is contributions to the community chests within the county. The program in Chester county now calls for a general director who will be assisted by—

A trained librarian, with aims toward putting a good library into every public school in the county. Already a "bookmobile" owned by the county is used to put books into 51 communities, but 50 others will be supplied in the near future. (This is one of the few counties in Pennsylvania with such service so far.)

A director of public health, a trained medical director who will be employed by the Medical Society, work cooperatively with the Health and Welfare Council, and who will be largely paid by the county commissioners. A new state law makes provision for such a health unit in each county—but Chester county is the first to adopt the idea in Pennsylvania. (Tennessee has now health directors in 25 counties; Ohio has 46 health units.)

A director of recreation, who will help with girl scouts, sponsor marble tournaments and children's playgrounds, as well as guide the Drama League and plan for historical pageants.

Finally to house all these activities an old home with historic traditions and massive rooms "Whitford Lodge," located on the Lincoln Highway almost in the center of the county, has been purchased as a county headquarters. Here will be a meeting place for all the health, social and educational agencies of the county, with offices for the various directors, and perhaps residences for county nurses; headquarters for the county library; place for the Drama League to meet, and work shop for the Little Theatre School.

According to Mr. John W. Herring, the executive director of the Health and Welfare Council, the results in Chester county so far indicate that any county with a similar well-to-do population part rural, part urban can support a similar service for the benefit of the people.

The need of rural recreation has long been felt, and the problem is being solved in many ways, but anything which provides for self-expression must always meet with special favor, especially after it has been tried.



Prize winners in the Dramatic Tournament. Members of the cast of "Fingerbolls and Aramints"—the play presented by the West Chester Homeopathic Hospital Nurses' Recreation Club, and winners of third prize in the second annual Chester County Drama Tournament.
Left to right: Elizabeth F. Kelly, Mildred Cassel (Standing), Elizabeth L. Enchue, Mary A. Kilgore, Christine E. Link.
(Photo by Belt.)

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN AND FARMER

Published Every Saturday by
CAPPER-HARMAN-SLOCUM, INC.
7301 Penn. Ave., Pittsburgh, Pa.

President Arthur Capper
Vice-Presidents T. D. Herman, Geo. M. Slocum
Manager Neft Laing

EDITORIAL STAFF
Editor-in-Chief E. S. Bayard
Editor C. L. White, M. C. Gilpin
Field Editors Miles Horst, G. W. Harris

EDITORIAL OFFICES
Pittsburgh Harrisburg Philadelphia

CONTRIBUTING EDITORS
R. P. Keeter J. G. Lipman
Alva Agew H. C. Kneidel
L. W. Lighty R. L. Scharring-Hausen
R. C. Blasingame A. A. Horland
J. E. Shigley S. W. Fletcher
T. D. Zinn Mrs. Gertrude Stewart
F. L. Bouley Gilbert S. Watts

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for livestock and classified advertising. No deceptive, immoral or swindling advertisement inserted at any price.
Member Agricultural Publishers' Association.
Audit Bureau of Circulations.

Volume 103, No. 3 Established 1877

ORATORICAL RESULTS

SAYS a western commentator on the campaign of the Farm Board and the U. S. Department of Agriculture for "adjustment" of wheat acreage in the great winter wheat states: "When wheat sells at the farm at around 65 cents it doesn't take a very persuasive brand of oratory to bring about acreage reduction."

EROSION'S TAX

BANKERS as well as agronomists are coming to realize erosion's heavy tax on soil fertility. In sections of the Southwest terracing does in part what cover crops do for us in the North. From the U. S. Department of Agriculture we learn of this regulation of the Federal Land Bank at Houston, Texas: If after making a loan the bank discovers that by failure to protect his field with terraces, the farmer is permitting his soil to wash away at a rate exceeding six inches in 35 years on a 35-year loan, he is subject to foreclosure.

DRUNKEN COWS

A NEW kind of stream pollution is reported in New Jersey. A farmer noting his cows romp through the fields in festive mood watched with amazement their inebriated antics finally end in death. Investigation revealed that alcohol from illicit stills seeping into the stream from which the cattle drank was the cause of their untimely end. Bootleggers and moonshine makers are notorious for disregard of their customers' welfare, but that innocent cows should be the victims of their greed or carelessness seems out of tune with even these discordant times.

WORLD'S GRAIN SHOW

THE World's Grain Exhibition and Conference, to be held at Regina, Canada July 20th to August 6th, 1932, promises to be the largest and most attractive of its kind ever held. Prizes totaling \$200,000 offer sufficient inducement from the monetary standpoint and the distinction of winning in world-wide competition should appeal to grain growers in this country. Classes are provided for wheat, oats, corn, grasses, clover and vegetable seeds. Canadians have carted away their share of prizes from our grain shows. We shall have an opportunity to meet them on their own ground and prove to them that good grain can be grown in these United States.

PENNSYLVANIA FARMER

PROTECT UNPOSTED PROPERTY

OFFICIALS of the State Game Commission investigated complaints of corn-pulling by ring-necked pheasants in southeastern Pennsylvania this spring. They found that the pheasant situation in that region apparently "is fast assuming the proportions of our deer situation." On one farm where 100 birds were trapped last year as a relief measure, they are equally numerous this year. Admitting that something must be done, the Commission asks, "How can any farmer expect to decrease the supply of ring-necked pheasants on his property if he persists in posting his land? Many of the complainants have turned out to be farmers who have permitted no shooting." We venture to predict that farmers will open their land to real sportsmen if the Commission will devise a way to keep out the hoodlums from nearby towns. Their opportunities for destroying property and endangering life are multiplied by the possession of firearms and the reckless abandon with which they "hunt" on unposted property.

FOREIGN TRADE

ENGLISH bankers, formerly in favor of free trade, have signed a manifesto calling for an open market in Britain for Empire products and tariffs against goods imported from foreign countries. England has placed an embargo on low-grade apples from this country, much to our consternation. It is denied that either of these acts is a specific reprisal against our new tariff, and plenty of precedents and explanations will be found to interpret the moves. But it's hard to dodge the inference that our example is encouraging others to exclude American goods from their markets. As Mr. Baldwin blandly says, "America is showing us the way." We may also be shown that Secretary of Agriculture Hyde's admittance that "tariff duties are seldom if ever fully effective in correspondingly raising prices" has more than a grain of truth in it. There is no way of measuring the effects of a tariff except by experience, and that we are going to have.

AN OPEN DOE SEASON?

THE State Game Commission has decided that an open season on antlerless deer may be declared from November 27th to 20th this fall in counties where they are doing damage. The Commission will receive petitions from residents of such counties up to October 1st, and then will make its final decision. The regular season for bucks will be December 1st to 15th. Anybody who objects to or who favors the killing of does now has a chance to air his views when it will do some good. Regardless of opinions about an open doe season the Commission is obviously fair to all parties by giving them opportunity to present their arguments before it makes its decision. And we predict that there will be plenty of arguments. The fact that game conservationists believe the maintenance of the deer herd depends on proper balance of the sexes and on adequate feed together with the feeling of farmers who have suffered damage to crops by deer may furnish more sentiment in favor of an open doe season than was the case in 1928 when such season was first tried.

SOMEBODY MUST DO SOMETHING

WE had the pleasure last week of entertaining thirty Iowa county agents on a tour of the East. They had been down to Washington to tell the authorities that they are for the Farm Board and all its works, good or bad, right or wrong. They didn't hesitate to express their opinion of eastern "capitalists" and eastern farmers. Both, it seems, are conspiring to make series of western farmers—the capitalists by opposition to

price fixing and other forms of farm relief, the farmers by indifference to "cooperation" and to the plight of the Middle Westerner who cannot make money by his old way of farming and doesn't want to change. It was strange to hear a county agent lambast those whose modern machinery and efficient methods enable them to make money when prices are below the Iowa farmers' cost of production. Somebody must do something to keep prices high enough so every one can make money. It's a grand idea. But in spite of their economies these county agents were a lusty and likeable lot. If we were an Iowa congressman we probably would vote for McNary-Haugenism or anything else just to keep them good natured.

WHY A NEW INDUSTRY?

ECONOMISTS are talking about the need of a new industry, one that will stimulate the economic life of the nation as it was stimulated by mass production of automobiles. They cite roadbuilding, the steel, rubber, plate glass, upholstery, electrical instrument, filling station, billboard and hot dog enterprises that have prospered because of the automobile. They look for a new marvel to set the economic world spinning again. They ponder on television, airplanes, industrial chemistry.

But why await the creation of new wants when countless old ones are still unsatisfied? How about bathrooms and barn paint, electric lights and wall paper, refrigerators and washing machines, lawn mowers and linoleum? The business of producing and selling these things on a scale to supply all who need them would dwarf the motor industry. It is easy to prove that farmers and others cannot afford the things that make homes attractive, that mean less drudgery for Mother. But it was even easier two decades ago to prove that the farmer and the working man couldn't afford an automobile.

WESTERN EGGS

THOSE who study the methods of the Pacific Egg Producers understand why Pacific Coast eggs bring better prices on the New York market than our own. Here are some of the reasons we think they will continue to top the market for some time to come:

The western poultrymen are developing a mechanical stamp to put a trade-mark on their finest eggs. They have a vacuum transfer device which puts eggs into cartons of flats cheaper than it can be done by hand. They are developing machines to seal egg cartons in transparent airtight wrapping to improve the appearance of the package and the quality of the contents. These happen to be a few of the current developments which "just scratch the surface" of their plans for the future. One doesn't overlook their nickname and trade-mark: Pacific Egg Producers—PEP.

CORN BORER CONTROL

PENNSYLVANIA farmers are ahead of growers in neighboring states in corn borer control efforts, according to entomologists who have observed conditions in the infested area this season. Clean-up work in Crawford and Erie counties is reported most successful. In 1929 four counties were included in the badly infested part of this state. The reduction to two counties this year indicates that the borer can and is being controlled. Keystone farmers who have cooperated so effectively since the borer invaded Pennsylvania deserve the gratitude of those in other parts of the state for meeting the pest with so determined a front.

July 19, 1930.

PENNSYLVANIA FARMER

(51) 7

New Jersey Farm Comment

By G. W. HARRIS

HUNTERDON county poultrymen probably will open an auction egg market at Flemington some time this week. The incorporation of the Flemington Auction Market Association is the result of several months of study of the egg marketing situation in the county and close observation of the working of the Toms River egg auction.

Some of the county's largest egg producers are wholeheartedly backing this new venture and the Flemington Chamber of Commerce has offered its support by furnishing a market building free of charge until the auction is well established.

This market without doubt will profit from the experiences of the Toms River project. The directors hope to avoid some of the things which the Toms River group have found disadvantageous to the auction selling of eggs. It is their plan to offer for sale eggs in large case lots with a privilege of accepting any portion of the lot bid in. All eggs, except those graded and packed by the large producers, will be graded and candled at the market. Producers will be charged five per cent of the gross sales for the grading, candling and sale of their eggs.

A group of the directors of the new Flemington Market, who visited the Toms River last Thursday, were very well pleased with its progress. Toms River egg producers opened the first egg auction in the state early in June. It was slow in getting under way because of lack of support and faith in this type of selling on the part of a large number of producers. Although many buyers attended this auction during the first month, not enough eggs and enough large case lots were offered for sale to meet their demands or encourage their buying.

Those poultrymen who first sponsored the Toms River market realized that the situation was critical and have been able to gain additional support for the market from their neighboring producers. Last Thursday was the market's best day since it opened. Seventy-eight cases of eggs were sold within a period of forty-five minutes, with mediums ranging around 35 cents and firsts between 40 and 40½ cents a dozen. Within the past four weeks the number of cases of eggs offered for sale at Toms River has been increasing from six to eight cases each auction day. If the volume continues to increase the success of this market is assured.

Too often farmers in discussing and planning a cooperative project enthusiastically offer their support, then wish to play safe by taking a back seat until their neighbors have taken all risks and proved the project a success. Such has been the case in establishing the Toms River Auction Egg Market. Now that the market is progressing it is time for the "back-seaters" to come forward and offer their assistance.

POLTRYMEN in Burlington county, producers of heavy meat breeds, also are considering the development of an auction market. As the poultry meat industry of this county amounts to nearly \$1,000,000 annually, these producers feel that the establishment of a poultry-meat auction market might offer them a more advantageous method of selling their products.

William K. Hokstara, president of the Burlington County Board of Agriculture, has appointed the following committee to study the possibilities of such a market: Barclay Allen, Vincentown; A. H. Forsythe, Medford; Joseph H. Rogers, Wrightstown; John S. Pew, Mt. Holly; Harry Hancock, Burlington; H. C. Hancock, Julinstown; Glen T. Stonenbergh, Cookstown; Isaac Harrison, Crosswicks; H. G. Taylor, Jr., Riverton.

AT the close of last week about 11,000 carloads of white potatoes from the Eastern Shore had found their way to market and the price had dropped to \$2.25 per barrel. Only about 65 per cent of the potatoes of the Shore are dug and already some of the New Jersey crop are appearing in the markets. Although the Eastern Shore crop probably will not exceed 16,000 this year, the crop is about two weeks late and a part of it will come in direct competition with New Jersey's first offerings.

As increased acreage and a good crop in Missouri and the Kaw Valley has resulted in the flooding of western markets of low-priced potatoes, and as a result of reduced Canadian sales because of new Canadian tariff levy of \$75 per 100 lbs. on imports, the Eastern Shore growers must look to the eastern markets for their outlet. This accounts

for the sharp drop in price and may prove serious to New Jersey producers during the early harvest season. The Eastern Shore of Virginia Produce Exchange advises their producers as follows:

"There is no apparent reason to expect price advances during the next ten days, possibly in two weeks we might see an advance. Northampton county and Norfolk will practically close out in the next week or ten days. North Carolina is now reduced to a few cars a day. Accomack county must ship heavily. New Jersey is on the market and Missouri and Kaw Valley are at the peak of their shipping season. Any expectation of a better market later of course is a gamble, but it is quite reasonable to suppose due to unusual overlapping of harvesting by the above mentioned districts that there might possibly be an increase in price when the bulk of our shipments has gone. This will depend on the maturity and rate of harvest in northern sections. We do not suppose that there is much



Farmer Jones takes the airway interurban.

opportunity to hold many potatoes for ten days to two weeks. We could not go on record as fully advising it, but it does look as though there is a good gambling chance to get sufficient increase in price to justify those who care to hold a few potatoes until that time."

PONY PENNING DAY at Chincoteague, Virginia, will be held on July 31st. The round-up of ponies on Chincoteague Island always attracts many visitors. This small island off the Eastern Shore of Virginia is the home of the Chincoteague ponies which range at will over the island until corralled for the above event when they will be offered for sale to the visitors.

THE Masonic Home Holstein herd in Burlington county has just completed an enviable yearly record with an average production per cow of 11,847 lbs. of milk and 422.6 lbs. of butterfat. This is the highest record for the year in this Association according to Paul Willandson, tester for this Association.

A summary of all of the Herd Improvement Associations for last year shows only ten herds in the state producing over 400 lbs. of butterfat. Eleven of the 18 cows in the Masonic Home herd produced over 10,000 lbs. of milk, while 13 produced an average of over 300 lbs. of butterfat.

SALEM county Four-H Club boys and girls, nearly 150 of them, gathered at Centerton Park last Thursday for an all day picnic. This annual get-together of all club boys and girls in the county offers an opportunity to become acquainted so that they may better cooperate in various club projects throughout the year.

Swimming, baseball and other sports were inter-

rupted only by a basket luncheon at noon. After lunch they continued their day of play under the supervision of R. C. Noble, county club leader, County Agent Ball and Miss Dixon, home demonstration agent, until time to leave for home in the evening.

THE Kent-Sussex County Fair is scheduled to open at Harrington, Delaware, on July 29. This is commonly thought of as Delaware's state fair and always attracts a large attendance.

SUSSEX County Pomona Grange is celebrating its silver anniversary at High Point Park on July 19. Hon. L. J. Taber, Master of the National Grange, and D. H. Agans, Master of the State Grange, will be the speakers at this important event in the history of Sussex county Granges. A basket lunch will be served at noon.

A NEW package for tomatoes and peppers has appeared on the Philadelphia markets and comes from the Swedesboro, N. J., producing area. This straight side one-half bushel basket is similar to the straight side bushel basket commonly used in New Jersey for apples.

This new covered package seems to be very popular with buyers, especially chain store buyers, as it carries well, stores easily and is a convenient size.

NEW JERSEY'S high scoring entry in the Vineland Egg Laying Contest during the fourth week was a pen of Rhode Island Reds from Woodview Poultry Farm, Mt. Holly. These birds with a production of 2,068 eggs have dropped from fourth to fifth place among the leaders in total production. Alex Baird's flock of White Leghorns, with a score of 1,993 eggs, is placed among the leaders. With the exception of these two New Jersey flocks entries from other states hold the remaining ten highest places.

Rhode Island Reds owned by the Scott Poultry Farm from Groton, Mass., lead all entries with their 2,194-egg score.

IN the Passaic contest nearly all the leaders are New Jersey owned flocks. The only changes in total score among the leaders was made when an entry of White Leghorns from Darrfelt Poultry Farm at Preakness dropped from sixth to seventh class, and Edmund L. Kelley's White Leghorn entry from Paterson moved up to tenth position.

THE White Leghorns from Fox & Son Poultry Farm, Little Falls, continues to lead the Hunterdon County Egg Laying Contest with a 94-egg lead. One of Joseph Joachim's entries from Riverton holds second place while another of his flocks improved their standing from eighth to sixth place. The Jerseyland Farm Leghorns from Point Pleasant moved from sixth to fifth place and the White Egg Farm entry flock from Cedar Grove displaced the Flenderf Farm entry to take tenth place.

NEARLY 1,500,000 forest tree seedlings have been distributed to New Jersey land owners since the first of the year through the joint efforts of the Extension Service of the State Agricultural Experiment Station and the State Department of Conservation and Development.

The distribution of seedlings by counties was as follows: Morris, 111,000; Monmouth, 84,750; Somerset, 71,500; Sussex, 61,800; Essex, 44,500; Passaic, 38,500; Warren, 38,000; Bergen, 37,000; Mercer, 33,000; Hunterdon, 25,250; Union, 18,000; Burlington, 15,000; Hudson, 14,200; Middlesex, 10,000; Ocean, 9,000; Salem, 9,000; Camden, 8,500; Atlantic, 6,000; Cumberland, 5,000; Cape May, 3,000; and Gloucester, 2,000.

UNLESS England's partial embargo on raw apples from the United States is lifted a modified New Jersey's export business of summer apples is virtually wiped out. Prof. A. J. Farley, pomologist for the Extension Service at the State Agricultural Experiment Station asserts.

According to Professor Farley, this order virtually destroys New Jersey's export market for summer apples since only a limited number of growers in this state produce apples which meet the high color requirements of the grades acceptable to the British. Otherwise their apples are of as good a quality as those which may be shipped into England.

IN the North Country of Ontario civilization is seen in the making. Here the pioneer meets the primitive and the hardship, hope, courage and achievement of the settler are written on the landscape. Five hundred miles north of Pittsburgh as the crow flies, and twice as far by rail, we strike a clay belt. Canada's latest contribution to agriculture. Having traveled through rough wooded areas well up toward Hudson's Bay we expect to find a benighted region, devoid of useful vegetation if not encumbered with ice and snow. What we do see is a level country, enterprising towns and promising farms in the early stages of development. This apparently vast expanse of fertile soil covered with tariffy grass and trees made the itinerant editors' eyes bulge with wonder as they whispered in awe the words of Brigham Young, "This is the place."

The clay belt is 200 miles long and no one knows how wide. When the "bush," as Canadians call forest growth, is cleared off a rich chocolate clay loam is encountered. Hay, clover, oats and vegetables are grown. The newly cleared land is very fertile. Clover grows like a weed on it and without lime. How this soil will stand up under cultivation remains to be seen, and the Canadian government has experiment stations at work now gathering information concerning it.

At Kapuskasing, the western point of our journey, is located the second largest experiment station in the Dominion, some 1,280 acres with suitable buildings, where 15 years ago "bush" covered the country. During the War this was a German prison camp, and a good place for one, since it would be a long, lonesome journey to leave it on foot. Some of the prisoners were so pleased with the country that they have come back and settled there. The section is suited to livestock production and possibly wheat, for while it is 7 1/2 north it is in latitude 50, which is south of some of the wheat areas of western Canada. Here we encounter the typical stage—oats, peas and wheat. It makes a good feed, keeps well and those crops flourish in the climate.

A Forest Fire

The demonstration farm at New Liskeard, on the southern edge of the clay belt, has produced an average of 31 bushels of wheat per acre for the last three years, as high as 82.3 bushels of oats per acre with an average of 64 bushels on 14 varieties on test. Potatoes, small fruits and livestock also do well. New Liskeard is in the center of a well-settled farming district and is one of the leading summer resorts of the North.

Eight years ago Haileybury, another town in the older part of the clay belt, was burned to the ground by a forest fire. For fifty miles the fire swept all before it including farm buildings, standing timber and in many cases human life. Blackened stumps of broken spruce remind us of the tragedies these pioneers met. The town itself has been rebuilt and is a substantial and progressive one. Farm buildings are appearing as evidence of the unconquerable spirit of the pioneer.

There is something fascinating about a new country. It may be the enthusiasm of the settler, his indifference to disappointment, his hope in the face of obstacles or his joy in freedom and communion with the "great open spaces." Or it may be the lure of a country before civilization has put its smokestacks and advertisements on it. But perhaps it is the instinct of the wanderer in all of us which expands with satisfaction when it comes in contact with something new. At any rate the clay belt looked good in June. We did not see it in January.

The rather impervious sub-soil and the possibility of frost any month in the year will tax the ingenuity and perseverance of the settlers before it develops a safe and stable agriculture.

Six hundred miles in distance and 300 years in time separate the clay belt of Ontario from the capital of Quebec. The ancient city, which bears the name of the province, was started in 1608 by the French explorer Champlain. Four-fifths of the people still speak French and the town has more of a European atmosphere in architecture and customs than any other we have seen this side of the Atlantic.

Quebec is full of historic interest from the Plains of Abraham, which was the scene of the destiny of two great nations, to the massive walls which mark it as the only walled city of America. It might also be said to have the distinction

Farm Editors in Canada

By M. C. GILPIN

of possessing the steepest hills outside of West Virginia.

High on a hill overlooking the St. Lawrence river sits Chateau Frontenac, a stately hotel built by the Canadian Pacific Railway. Its towers and turrets, terraces and courtyard are a part of old France transplanted into the New World. A broad terrace stretches to the Citadel on which ancient guns still guard the picturesque ramparts. And on this terrace the people of Quebec walk up and down, up and down, warm June evenings, hitting up a brisk pace. To a stranger it seems like some medieval custom, and on looking down to the river he understands how Wolfe was thinking of graveyards when he knew he must scale the heights. The wives of the handsome roaming editors took a firm grip on their spouses' coat sleeves as they joined in the terrace promenade, for the French-Canadian female in her early years is famed for her dangerous beauty. But our experienced eyes could see no difference between the natives of Quebec and those of the land we came from.

The sights of the city are most effectively seen from a precarious perch on the rear seat of a cabriolet, a jaunty two-wheeled vehicle of antique design. One driver that we talked to had been at the job 55 years, and his horse looked as if it might share the honor. Some days he makes six or seven trips, which at \$3 a trip gives a nice in-

leading farm activity. On inquiring of one of the French county agents (called agromos) we were informed that the farmers who are following modern practices of improved breeding, feeding and crop culture are getting along quite well, while those more careless in their habits are less satisfied with their results.

Bull associations, cow-testing associations and young people's clubs are used the same as in this country to encourage and inform farmers on economical production. Most of the dairy cattle are tested for tuberculosis. No opposition was met in this work, since the percentage of reactors was very low on the first test, about half of one per cent. Three breeds of dairy cattle are kept, Ayrshires, Holsteins and French-Canadian cattle. The latter breed, which comes from the same source as the Jersey and the Guernsey, now has a breed association and is being improved along customary pure-bred lines. Its chief advantage is high percentage of butterfat, the average being 4.4 per cent. The breed resembles the Jersey in appearance.

Although the first cultivation of the soil in Canada was in Nova Scotia the first real Canadian farmer was Louis Hebert, who landed in 1617 and began to clear land at a spot now in the middle of Upper Town, Quebec. Others followed and the "habitant," as the rural French-Canadian is called, has long been famed in song and story. He is a steady, industrious, thrifty and home-loving individual, strongly attached to his church and fond of political discussion. Like the peasant of old France he is strongly attached to the soil and generally settles his sons on neighboring farms. He is opposed to social legislation that would interfere with his personal liberties and is not a ready listener to the labor agitator or socialist propagandist.

The field crops of the province are valued at \$130,000,000 annually. Over three million dollars is realized from maple products and the livestock is worth over thirty-three million. There are 1,560 cheese factories in operation. More than 102,000,000 pounds of butter and cheese are produced a year and a considerable quantity of the tobacco grown in the Dominion.

Water power is abundant almost everywhere. It has been developed for commercial purposes at Montreal, Quebec, Shawinigan and other places. Sugar, textiles, pulp and paper are among the important manufactures. As stated before the manufactured products of Quebec amount to nearly a billion a year and range from musical instruments to gun powder and from shoes to railway cars.

Pulp and Paper

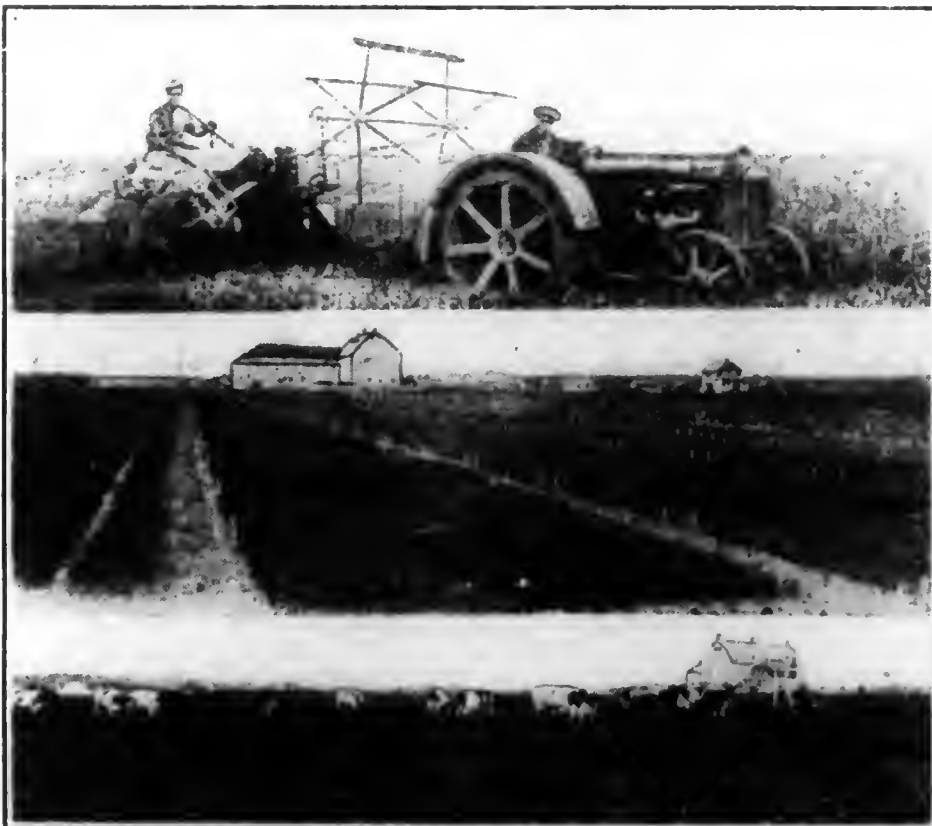
The insatiable desire of the American to read, or at least to buy, newspapers and other periodicals means money for Canada, which dominates the world market of newsprints. In Ontario, Quebec and other provinces the importance of this industry is evident. The towering spruce, the paper mills, the rivers full of floating logs and the trainloads of paper are the evidence that greets our eyes. Paper is said to be the largest industry of Quebec as it is the largest industry of the Dominion. More than 80,000 square miles of the forests of Quebec are under scientific timber exploitation, and another hundred thousand square miles are available.

The Prime Minister of Quebec recently stated that 80 per cent of the Canadian forests belong to the Crown and are under the jurisdiction of the Forestry Department. These forests are cut under licenses. Such grants are discretionary with the government and may be changed or revoked entirely. A large part of the paper mills represent American investment, but they are run by Canadian executives with the aid of Canadian labor.

The world produces some 6,000,000 tons of newsprint a year. Of this the United States produces 1,400,000 tons and consumes 4,400,000 tons. Canada produced 2,700,000 tons last year and consumed about 185,000 tons. Up until 1926 the United States could supply the greater part of her newsprint, but since then Canada has been our chief source of supply.

There is a limit to everything, even to the forests of Canada. As a matter of fact they look pretty scrawny in places. Fire reaps a heavy toll. Replanting seems a pigny operation. Our efforts toward forest conservation and extension appear well justified if we are to have wood for our purposes, not to say printed matter.

The northern part of Quebec, between Labrador and Hudson Bay, is largely unexplored. It has little mineral deposits. (Continued on page 10.)



An idea of the general appearance of Ontario's clay belt, after it is cleared of trees, may be obtained from the above views of the demonstration farm at New Liskeard. At the top is shown wheat being cut last fall. In the center are seen test plots and farm buildings, while at the bottom is the dairy herd on clover pasture.

Milly Woodbridge's Trek to the Pacific

The Pioneers of the Peace River Valley

By C. A. Stephens

Copyright, 1930, by Copper River Steamship Line.

A LITTLE to their surprise McIntire called on them at their lodgings that evening. They conjectured at first that he had thought better of giving them Mike and had come to get him; but it proved merely a friendly visit. He remained conversing for an hour, rather more with Milly than with Winthrop, seeming much interested in the account she gave of their journey through the mountains. "If you settle at Prince Rupert, I hope you will allow me to continue our acquaintance," he said, on taking his leave. "I'm a lonely old bachelor—and you've got my dog, you know," he added laughing.

"I hardly see why he called on us," remarked Milly, after he had gone. "Well, sis, it is quite evident that it wasn't to see me!" Winthrop replied with a fraternal grin.

It was not till the fourth morning after their arrival at Prince Rupert (when their personal appearance had been greatly improved) that Milly would consent to call on the Mastermans whom she imagined to be living in much comfort, if not elegance. They had not heard from them for going on two years, but supposed them to be still at Prince Rupert. The letter Quinby had written to inform them that he and his brothers had gone to Queen Charlotte's Islands, to embark in the whaling business, did not reach the Peace valley until after the Woodbridges had set off on their long journey through the mountains. It was therefore with much surprise and a sense of great disappointment that they learned at the post office the Mastermans' address was now at Skidegate, on Graham Island of the Queen Charlotte's group. Pursuing their inquiries, they were told that a small steamer made weekly voyages across Hecate Strait, to the new port of Masset and afterwards to Skidegate; and after some anxious deliberations as to ways and means, they cashed what remained of the fingerful of loose gold and took passage for Skidegate. Pinky-Blue and Mike accompanying them.

They were an entire day crossing over from Prince Rupert. Hecate Strait fully justified its ominous name. There was a heavy swell running in from the Pacific; both Milly and Winthrop were somewhat "unhappy", poor Pinky deplorably so; she had never seen the sea before.

The steamer proceeded first to Masset at the northerly end of the Island and they did not reach Skidegate Inlet till the following day. The locality is a picturesque one. A straggling new settlement extends all along the north side of the Inlet, inhabited by fishermen, miners, lumbermen and sea-otter hunters. Hard by are two or three Haida Indian villages.

But here again disappointment awaited them; for on landing they were told that the Mastermans had settled farther down the Inlet, on the channel leading out to the Pacific, and had recently set up their works there, but they had gone out on a whaling voyage a week previously. When they would return, no one of whom they inquired would hazard conjecture. It might be days, weeks or much longer.

THE settlement had an odd, semi-barbaric aspect Milly confessed they were lonesome at first. Here for the first time they heard "Chinook" spoken; that quaint mongrel language of the north-west coast, often called the "Chinook jargon." Whites, as well as Indians, used it; and this probably added to the barbaric impression that Skidegate gave the newcomers.

After looking about during the day, they were able to rent a small new cabin, built of cedar logs, about half way between Skidegate post office and the Indian village at Haida Bay; and here, with Pinky's assistance, Milly began housekeeping again, much as in the cabin on the Babine Lake. At Skidegate they saw numerous totem poles, several of them very grand, imposing ones. A day or two later they made the acquaintance of a Haida chief, known among the whites as "Billy Trombone" his most treasured possession being a battered old brass instrument of that name. Old Billy was a massive, broad-faced, good-natured Indian who took a fancy to Milly. Over and over again he explained and expatiated to her concerning the totem pole in front of his rancherie, beginning at the top and coming slowly down to the last awful visage at the bottom, when, pointing proudly to himself, he said, "That me!"

From old Billy Trombone they learned a good deal about totem poles and the kind of wood they are carved from, namely, a species of large, durable cedar which grows abundantly on Queen Charlotte's Islands. Winthrop became much interested in the timber there, and a few days later obtained work — by way of supporting his family, as he put it — in a sawmill, half a mile from their cabin.

His family, however, was soon reduced to Milly and Mike. Quite unexpectedly one night Pinky-Blue, who had gone out to catch fish for their evening meal, failed to return. Nor could she be found; but two days later it was ascertained that Pinky-Blue had gone to be house-keeper at the cabin of one of the Haida tribe, living at Kagan Bay. She had met this Indian while fishing and the bargain with him, or the wooing — whichever it could be called—had occurred in less than twenty minutes! Milly did not see her again for three weeks or more; and so far from evincing any regret at deserting them without warning, Pinky laughed boisterously, exclaiming, "Me got good house now — good man!"—and added with an elfish grin, "Me get man 'fore you do!"

Pinky had been with them so long and they had done so much for her that Milly took her desertion quite to heart for awhile. The settlement at Skidegate is not a large one; the Masterman boys, it appeared, were already well known there; and about a fortnight later Winthrop heard a rumor at the mill where he worked that their steam whaler was making its way up the long, devious channel from the ocean, towing two whales. Whaling in these waters, as may here be said, is no longer conducted from large ships, equipped with harpoons and whaleboats and provisioned for long voyages. Small steam craft, armed with bomb-guns and an air-pump, now make shorter trips. Whales are shot and killed by bombs; and to prevent the carcasses from sinking, they are inflated with air, then towed to some harbor where the flensing and trying out are done ashore instead of at sea.

There was a thick fog on the following morning, as is so often the case at this season of the year on that coast. None the less Winthrop procured a

The Cheerful Plowman



KEEPING UP THE RENTED FARM!

THIS seldom in fiction and seldom in life I find a young couple like Bloom and his wife, for though they are leasing another man's farm the place is kept up like a dream and a charm. In fact, they improve it ("Tis hard to conceive!"), improve it immensely, I'm prone to believe.

The lawn as they found it was cluttered with weeds that scattered their petals and scattered their seeds. The grove needed trimming, the bushes were punk, while piled by the barn was a trainload of junk. Such bareness, such bleakness, such dismal despair pervaded the grounds and pervaded the air that every one said, "What a place, what a place! 'Tis a tale of neglect and a tale of disgrace! Van Bloom and his Amy will wilt in despair; the folks should remember them both in their prayer."

But listen, they went at the job with a will and cleared off the weeds from the lawn and the hill. They painted the house and they papered it too, and put on some awnings before they were through. They cleaned up the grove and they dolled up the sheds; they planted some flowers in the clearest beds; they set out some roses, some tulips and pinks, they greened up the grass and they swept up the crumbs. In less than a jiffy the place was a dream with all of the charm of a bucket of cream.

"What? Fix up a place that is rented? Ah, no! The weeds are not yours nor the cockles that grow. What? Plumb up a house that another man owns, and rake up the bricks, and the eans, and the bones? Why, Amy and Van, you are foolish and vain, the neighbors will think that you're keding insane!"

That's what people said, but in spite of it all they trimmed up the yard and they plumed up the wall. The place is just rented, that's true as can be, and yet it's a home, as the neighbors can see. The landlord, no doubt, is the owner, good man, but two other owners are Amy and Van. This world will be better when tenants all say, "Well, rented or not, it is our farm today!"

J. E. T.

canoe with an Indian to paddle it; and he and Milly set off to make their long-deferred call on the Mastermans. They had the Inlet to cross and Maude channel to thread, but finally reached the place where my enterprising young kinsmen had established themselves. The mist was so thick, however, that they could scarcely see three yards in any direction. Indistinctly they made out a long new house, situated a little way back from a wharf where they discerned the dim outlines of a small steamer. Farther along the water front, but wholly veiled by the fog, voices and other sounds as of many persons hard at work with tackle and block and a winch, were borne to their ears; while hard by, the crackle of soft wood fires gave evidence that boiling blubber was going on beneath a corrugated iron shed close down by the water. Plainly a very busy place.

Milly and Winthrop approached from the rear, peering cautiously in the thick mist. "Let's surprise them! Let's have some fun!" whispered Winthrop. "You call to them, sis. We'll keep out of sight and see what they'll do!" And to humor him, Milly did so. "Hullo Quinby!" she cried. "Hullo, Quinby Masterston of the Peace River valley!" she repeated. "What are you doing away over here?"

Silence fell suddenly in the mist ahead. They heard a low exclamation, several of them, then footsteps, and then dimly the form of a person—Quinby—coming slowly past the shed, staring this way and that in great bewilderment.

Whereupon they drew back a little farther and Milly again called out softly, "Hullo, Quinby! You don't know who's come!"

For several moments young Masterman stood in a maze. Winthrop then burst out laughing and rushed forward.

But still Quinby stood speechless, till Milly laughed and said, "Don't you know me, Quin?" Then he found his voice and sprang forward, shouting, "Oh, Milly! Milly Woodbridge! I knew that was your voice! But I thought it was your spirit calling to me out of the mist. It scared me nearly to death! For I had given you up for lost! But it is you, isn't it?" And now Milly had some difficulty in preserving what she considered the proper proprieties, especially since Jesse and Welcome were coming in sight, as well as several of their wondering helpers from the wharf.

"Yes, Quin, I've brought her!" Winthrop was saying hilariously. "But I warn you right now to be on your guard against a young lawyer, named McIntire, over at Prince Rupert. We had to fairly run away from him! And this is his dog!" added Winthrop, pointing to Mike who stood looking very earnestly up in Quin's face to see if he were really a suitable person to be so familiar with his adored mistress. Apparently he decided it was all right, for presently he wagged an assenting tail.

Thus and there, in the fog, near the crackling fry-kettles, the reunion of these warm friends and former neighbors on the Peace took place, after all the many perils, sorrows and vicissitudes of that long trek to the Pacific.

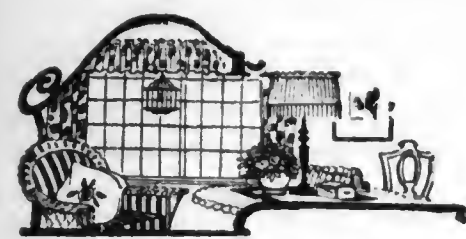
AND that brings my narrative down nearly to the present time—the time of my recent visit of a month to my kinsfolk at Queen Charlotte's Islands. Evidently they are now very prosperous there. Cousin Ellen (Mother Masterman) confided to me that a single cruise of a week in north Pacific waters often netted them more in oil and whalebone than had come to them from years of farming in Dakota.

"That was a sorry venture of ours in the Peace River valley," she said. "Like the Woodbridges we lost nearly everything we had there. All the same it led us to migrate here and opened the way to something vastly better. So we don't regret it, and I'm sure Quinby doesn't for it was over there on the Peace that he became acquainted with Milly—the finest girl I ever knew, and one I shall be more than glad to have for a daughter!"

Cousin Ellen went on to tell me that the Mastermans had urged Winthrop and Milly to come at once and share their new house on Skidegate Inlet with them, and that they had felt almost aggrieved at first, because Milly had thought it better that she and her brother should go on living awhile longer at the cabin they had rented on the other side of the Inlet.

"But Quin is off up there in his motor boat about every day now," she added, laughing. "And I shall be glad when they are married and Milly comes down here to live with us."

I have since understood that the Mastermans offered Winthrop a partnership with them in the whaling business. Also that Mike has taken with much zest to whale hunting. Welcome has written me that Mike sits up forward on the wheel house (Continued on page 15.)



The Farm Home



Next Winter's Meals

By MRS. GEO. W. McFARLAND

"I SIMPLY can't think of anything to cook," laments Mrs. Brown.

"Our grocery bill is scandalous in May," remarks Mrs. Smith. "I don't have a cent left after the groceries are bought."

There are many Mrs. Browns and Mrs. Smiths over this country of ours worrying along during the spring months wondering what to cook, or lamenting about the grocery bill. We farm women have a portion of the year when we are flooded with good things to eat. Then comes a time in the late winter and early spring when it is hard to cook a variety except at the expense of our pocketbook. Of course the solution is to conserve what we have when we have it. The thrifty farm woman can have a variety of food for her table the year round and at the same time buy very little except the staples.

Most country women can enough fruit and jelly to supply the family during the winter. So I am going to pass over fruit canning and take up some of the ways to conserve other home products.

Corn is one of the most common things raised on a farm. But how good it is. There are numerous ways in which corn can be put away for winter use. The most common methods are canning by cold pack or steam pressure. I am sure most housewives are familiar with these methods, as they are printed so often in magazines and farm papers. It is the easiest way to can a large quantity of food and always be sure of having it fresh and sweet. Sometimes it is nice to surprise your friends by having corn on the cob in January. Corn can be cold packed on the cob the same as when it is cut off. Select small ears of sweet corn that will fit into a quart jar. One jar will hold only about three ears of corn but it takes much less time to prepare it so you can afford to fill more cans. It is cooked in exactly the same way as corn cut from the cob.

Dried Corn Is Delicious

Some women, especially older women, don't like to be bothered canning such a lot of corn at one time and it never pays to boil a boiler full of water for three hours unless we have it full of jars. A good method for them to save their corn is to dry it. This can be done a little at a time during the corn season. Cut the corn from the cob, spread it thin over a cookie pan and place in a slow oven. Every once in awhile it should be stirred and spread over the pan again. It takes a good many hours to dry it but very little attention is needed.

When dry, it should be hard white grains or perhaps slightly brown. If it is still moist when evening comes, set it out and put it in the oven again the next day. When it is dry, put it in a paper bag and hang away in a dry place out of reach of the mice.

To prepare this delicacy for the table, never cook it; cover a cup of corn with warm water and set on the back of the stove. Let it stand until each grain swells out to its natural size, then warm and season with salt, pepper and butter. It has a rich flavor that is wholly different from canned corn.

Here is a recipe for corn salad that helps give variety to cupboard shelves:

Fifteen ears of cooking corn, two heads of cabbage, eight onions, five worth of celery and mustard seed, one-half gallon of vinegar, one cup of sugar, one-half cup of salt. Cook until tender, fill in jars and seal.

Hominy is another corn dish that can be made in the winter time from big white ears of field corn. Homemade hominy has a fine taste, although it is not as well bleached as factory hominy. Select seven well ears of white field corn, shell from the cob and put in large granite kettle or pan, pour over it one gallon of water and one tablespoon lye. Then let it cook long enough for the kernels of the corn to drop out. Take from the

stove and wash thoroughly. A good way to wash it is to scour the kitchen sink, then pour the hominy into the sink. Use plenty of water and rub the hominy well, getting as many of the kernels out as possible. When it is washed, pack in jars the same as when cold packing corn to can, fill jars with water and let cook for one hour in boiling water.

I like to fill some cans with pumpkin to be used when I rush home from a club meeting or town and wonder what I am going to have for supper. It takes only a few minutes to make crusts and a smile greets me when the family smells pumpkin pie.

But our cellar shelves wouldn't be complete without some sauerkraut. Here is a good recipe: Use one tablespoon salt to one gallon of chopped cabbage. Put the salted cabbage in a keg and pound until juicy; keep adding more cabbage and pounding it down until the keg is full. Cover with a clean cloth and lay heavy weights on top of the cloth. Let stand for three weeks or a month in a warm place. When kraut is well cured, take out of the keg, heat and pack in jars and seal. This will keep any length of time. Then on market day when we pass a butcher shop and smell the fresh kraut on the counter, we aren't tempted to buy at all; we have only been given an idea for dinner.

What an array of good things we can have if we set our minds to it. Then with our cupboards filled to bursting let the winter winds blow while the hens fill the egg basket and we smile, knowing the profits won't all go to pay the grocery bill.

To save food isn't the sign of stinginess but the marks of good sense because the margin between the income and the out-go is our profit. And the profit puts in our water systems and electric lights, good refrigerators and all other nice things we love to have.

New Liquid Fuel Stove

THIS fine new, fully equipped snow-white range with full porcelain enamel finish establishes new standards of convenience, beauty and performance in liquid fuel stoves.

The burners are of the long chimney type, fitted with automatic wick control devices, and one of them is an extra large or giant burner. They are arranged in a way that is new to all stove users. Two of these burners of the cooking top being in

front and one in the rear, providing cooking space that is almost square, similar to that of gas stoves.

This range has a roomy built-in "Live Heat" oven, porcelain enameled outside and inside, counter balanced drop door and built-in heat indicator.

Stepping Along

EVERYONE has a different individual tempo, or speed of living and work. When a lively march sounds, how we all perk up and step lively! What is the tempo at which you work? How may I keep my working tempo and that

of my family at normal? asks the home-maker. And a part of her answer is to hold to good health for herself and her family.

She can march to the sound of invisible music if she has plenty of rest and sleep, good food and fresh air, and does her valiant best to keep her mind free from worry. But even the liveliest person, lacking enough sleep, may lag, and her nerves may jangle. Find your natural tempo, your normal working speed, and then keep it up rather than spur your efforts to a frenzy at one time, only to drag into unaccomplishment shortly afterward. M. C. E.

Insect Pantry Pests

THERE are more than 40 different beetles and moths that infest grains and other dry stored foods. Some of them occasionally invade kitchens and storerooms in private dwellings. Among those most frequently found are the cadelle beetle, the mealworm beetle, the confused flour beetle, and the sawtoothed grain beetle. These beetles feed on flour, grain products, dried fruits, seeds, nuts, spices, tobacco and other starchy and woody materials. Some prefer one food and some another, while some are quite general feeders.

The Bureau of Entomology of the U. S. Department of Agriculture explains that these beetles can live on very small quantities of dry cereal that they find in cracks, corners and crevices of flour bins, pantries and kitchen cabinets. So it behooves the housewife to see that no food material is lodged in such places to invite these unwelcome visitors. The girl in the illustration is shown cleaning the

corners of a cabinet with a skewer to remove any cereal, including flour or bread crumbs, lodged there.

The Indian meal moth is another of the cereal pests that makes a loose webbing sometimes found in cereal boxes. Cleanliness and heat are the best methods of ridding the kitchen and storeroom of meal beetles and moths. All infested material should be burned. All bags and containers in which foods are to be stored should be sterilized. Clean all lint and

dust from shelves where the insects might live. Use plenty of hot water and soap in cleaning. If you are closing the house during the warm months, even for a few weeks, it is better to throw away small amounts of cereal than to store it with the likelihood that it may become infested and give trouble all through the pantry or storage closet.

Sodium fluoride, a fine white powder available at any drug store, is cheap and it is the best substance known for combating roaches. It may be used pure or mixed with equal parts of flour. It should be dusted over the shelves, tables and throughout the runways of the roaches. Sodium thiosulfate is similar but more toxic than sodium fluoride and may be preferred because it is the cheaper of the two insecticides.

Rugs Can Be Dyed

THERE is an remedy for almost everything, even a rug that does not harmonize with its surroundings. Instead of enduring a faded rug which makes the whole room look shabby, or one whose colors are so bright and whose design is so conspicuous that it jars with any color scheme, try remedying matters by changing the color.

Faded rugs or those which are poor in color or design may be dyed a shade which blends with other rugs, as well as the walls, curtains and furniture.

Rugs may be dyed at home with any of the standard dyes. Clean and dampen the rug first, then lay it flat over newspapers to prevent the dye from staining the floor, and apply the hot dye with a scrub brush. Any color may be used depending on the shade desired, but the original color must be considered. For example, a soft red applied over a tan rug may make a rich warm shade of brown, or applied over a bright green will give an attractive grey green.

When a rug pattern contains a few colors which are too bright or too light, dye may be applied on these spots to neutralize the color and then a wash may be put over the whole rug to make all colors harmonize.

NEVER say "No" to the child unless it is necessary. Saying "No" unnecessarily emphasizes the negative side of a child's disposition. And every mother knows that children are naturally negative enough without any unnecessary emphasis.

Don't coax and plead with the children to eat. Try to make them eat. Scientific experiments as well as common sense and simple knowledge of human nature tell us that this is most unwise, defeating its purpose. M. E.



Sleeves Call for the Short Flare

No. 6801.—Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires 3½ yards of 36-inch material. Price 15c or two for 25c.

No. 6426.—Girls' dress. Cut in five sizes: 1, 3, 5 and 6 years. A 3-year size requires 2 yards of material 32 inches wide. Low of ribbon requires ½ yard. Price 15c or two for 25c.

No. 6883.—Ladies' dress. Cut in five sizes: 31, 33, 35, 37 and 39 inches bust measure. A 35-inch size with long sleeves requires 5½ yards of 36-inch material. Short sleeves it requires 5½ yards. Price 15c or two for 25c.

No. 6904.—Child's overall rompers. Cut in three sizes: 6 months, 1 and 2 years. A 1-year size requires ½ yard of 36-inch material. Price 15c or two for 25c.

No. 6892.—Ladies' morning frock. Cut in five sizes: 31, 33, 35, 37 and 39 inches bust measure. A 35-inch size requires 3½ yards of 36-inch material. For contrasting collar ½ yard is required, 35 inches wide. Price 15c or two for 25c.

No. 6906.—Ladies' dress. Cut in five sizes: 31, 33, 35, 37 and 39 inches bust measure. Price 15c or two for 25c.

No. 6908.—Ladies' skirt. Cut in six sizes: 28, 30, 32, 34, 36 and 38 inches waist measure. A 32-inch size requires 1½ yards of material 35 inches wide. The width of the skirt at the lower edge with full fullness extended is 1½ yards. Price 15c or two for 25c.

No. 6759.—Girls' dress. Cut in five sizes: 1, 3, 5, 7 and 9 years. To make the dress as pictured in the large view, for a 4-year size requires 2 yards of 36-inch material. Price 15c or two for 25c.

HOW TO ORDER

Write your name and address clearly. State number and size of each pattern. Price 15c each, two for 25c. Send stamps or coin. Our Fashion Magazine will help in preparing your wardrobe. Copy only 10c. Address Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

TWO HELPERS INSTEAD OF ONE IN EVERY BAR
That's why

FELS-NAPTHA IS PARTICULARLY EASY ON COLORS

COLORED frocks and gay prints—how attractive they are this summer. And how easy it is to keep them bright and gay if you wash them with Fels-Naptha!

For there's naptha in Fels-Naptha. You can smell it—*plenty there!* Naptha, the safe dirt-loosener, combined with good golden soap. Working together, they bring you extra help—loosening dirt without hard rubbing even in cool water. And that, of course, means a lot in keeping colors bright and cheery!

Don't forget that Fels-Naptha's big job is the family wash. There, you can use water of any temperature—hot, lukewarm or even cool. You can use tub or machine. Soak or boil your clothes, just as you like. Fels-Naptha

will do a splendid job. And do it so quickly that your hands are in waterless time, which helps keep them nice. Get Fels-Naptha from your grocer today.

SPECIAL OFFER—We'll be glad to send every user of Fels-Naptha Soap a Fels-Naptha Chipper. Many women who chip Fels-Naptha into their washing machines, tubs or basins find this chipper handier than a knife. Use it and Fels-Naptha to make fresh, golden soap chips (that contain plenty of naptha!) just as you need them. Send only a two-cent stamp to cover postage, and we'll mail you this chipper without further cost. Write today. Dept. 7-7-19, Fels & Company, Philadelphia, Pa.

THE GOLDEN BAR WITH THE CLEAN NAPTHA ODOR

FELS-NAPTHA

Why experiment with unfamiliar soaps and lotions
Cuticura
has brought relief and happiness for fifty years to millions all over the world.
Soap 25c. Ointment 25c. and 50c. Talcum 25c.

QUICK RELIEF
STIFF JOINTS
JAPANESE OIL
Antiseptic Japanese Oil takes all aches, pains, out of arthritic joints and muscles. QUICK. It generates pleasant heat that drives out the pain. Won't blister like the old type liniments. 40 Years Success. At Drugists.

Conservative buyers

THE AMERICAN FARMER is always in the market. So's his wife. The entire family. In fact, Dad for seeds, fertilizers, machinery. Mother for furniture, household supplies. Jack may need a bicycle or rifle. And you know how the modern farm-girl likes to be up to date in everything. A thousand and one needs arise on the average farm.

Farm-fathers, however, are conservative buyers. They don't purchase things haphazardly. They make use of every opportunity to select just what they want. Common sense tells them which product will bring the most for the money they are able to spend.

Conservatism and success usually run parallel. Many of the most successful farmers read advertisements printed in this journal. They have learned that standard goods are more than experiments; that they can be bought with confidence; that no manufacturer could afford to advertise an inferior product consistently.

Advertised merchandise means definite savings. Advertisements tell you what a product will do, where it can be had, and how much it will cost. When you find yourself in need of a pair of boots, an engine, a new stove—anything—pick up your favorite farm-paper and read the "ads." They will tell you what you can get and what you will receive—before you get it.

THE YOUNG PEOPLE

We Hear From Our Four-H Club Delegates

FOUR young people from Pennsylvania were chosen to represent their state and the Four-H Club work at the fourth national Four-H Club Camp at Washington last month. They were chosen because of their accomplishments in the work and their possibilities for developing into rural leaders in their home communities.

Each of them has written a story especially for the Young People's page of Pennsylvania Farmer.

Assembly Programs

By Edna Hower

ARRIVING at Washington Tuesday evening, June 17, 1930, we found ourselves among girls and boys from every state to greet us to the National Camp.

Our assembly programs were held in the National Museum, beginning at nine o'clock.

Doctor C. B. Smith welcomed us to Washington, D. C. Honorable Renick W. Dunlap, Assistant Secretary of Agriculture, gave an address of welcome to the National Four-H Club conference. Hon. Florence E. Allen, Judge of the Ohio Supreme Court, pointed out to us the idea that Lincoln would be surprised at the new inventions if he were to visit us today. He could not be influenced by any one after he had made up his mind that he was doing the right thing.

Sunday night at eight o'clock the group assembled for a vesper service. The service was opened with the song: "Day Is Dying in the West." Dorothy Robinson of Maryland read the scripture lesson.

Educational Tours

By Madelon Stitt

THE first tour was to the United States Department of Agriculture Experimental Farm of Beltsville, Maryland. Here the dairy barn was as clean as a new pin. They also have calf and special breeding barns. They keep goats, pigs and chickens of all colors. To mark the white chicken pens they have white roses. We saw the beef herds and barns. Also the slaughter house and all its fixtures.

The Club members walked to the Bureau of Engraving and Printing and saw more paper money than they knew existed. Here ninety million stamps are finished daily.

The largest airplane we ever saw was in the Aircraft Building of the Smithsonian Institute. Some of the planes used in the late war were here. Lindy's Spirit of St. Louis was hanging above our heads in the Arts and Industries Building of the Smithsonian Institute. It is not a large plane but that did not make any difference. The original Star Spangled Banner was in a showcase here.

We rode in the elevator to the top of the Washington Monument which is five hundred and fifty-five feet high. The group then walked to the U. S. Department of Agriculture greenhouse. They are going to send a rose bush to every National Four-H Club delegate of 1930.

Buses took us to Mount Vernon where a wreath was placed on Washington's tomb. A group picture was taken with the mansion as a background. On Sunday we rode to the U. S. Department of Agriculture Experimental Farm at Arlington, Virginia. We were shown all around the farm but enjoyed the trip through the cold storage rooms most because it was a hot day.

The Memorial Amphitheater of Ar-

lington is a wonderful place. The delegates placed a wreath on the tomb of the Unknown Soldier.

We had the privilege of walking through some of the White House rooms. Then we went outside and had our picture taken with President Hoover. The President permitted the Club members to take pictures of him.

Mount Saint Albans Cathedral is a wonderful structure and is but one-third finished. They have been working on it since 1910 and it will take at least thirty years to finish it. The tombs of Admiral Dewey and Woodrow Wilson are in one of its chapels.

In the National History Building are prehistoric animals. The bird from which the idea of the airplane was taken is here. Animals and their homes, birds from all parts of the world and tribes of Indians and Eskimos are displayed in show cases.

The Corcoran Gallery of Art is just



Left to right: Miss Harmony Hutchinson, Home Economics Specialist, Pennsylvania State College; Edna Hower, Northampton county; Harry L. Smith, Union county; Herbert K. Anders, Montgomery county; Madelon Stitt, Juniata county; A. L. Baker, Pennsylvania Four-H Club leader.

filled with famous paintings and statues.

The Pan American Building has a little garden and fountain right in the center. They have a relief map of the Panama Canal zone and surrounding country.

The Library of Congress contains four million volumes. They have a track from the Library to the Capitol on which they can send books in two minutes.

The Youths' Conference

By Herbert K. Anders

I WILL try to give you some idea of the Youths' Conference. This Conference was held after assembly from 10 until 11 o'clock every morning except Sunday. All the state delegates, numbering about 160, were divided into five groups. Each group met at the scheduled time in separate rooms. Each group had a different set of six questions to discuss during the week and a progress reporter made a report in assembly of the preceding day's discussion. In this way the entire delegation learned what discussion was going on in the other groups.

On Wednesday, June 18, we organized, electing a chairman, secretary, recorder, and a progress reporter. Following the election we began discussing the question, "What should be the qualifications for local volun-

teer leaders in Four-H Club work?"

Thursday forenoon we discussed the duties of a local Four-H Club leader. This was summed up as setting an example, assisting the members in their work; act as an adviser; encouraging the members, and cooperating with the Club.

Friday, our question was, "How should local Four-H Club leaders be helped to guide their clubs most effectively?" And, "What in this regard may be done to lessen the turnover of local Four-H Club leaders?" We came to the conclusion that local Four-H Club leaders could be guided by county agents, training schools, cooperation of parents, members and the public, and from specialists.

Saturday, we discussed the best size of a club to be handled by a local volunteer leader. We decided to group the clubs under two types: first, where only one project was carried, it should consist of not more than 12 and not less than five members. The second, achievement, clubs where various projects may be carried, with not more than 35 and not less than five members enrolled.



This is Claire Warren Wible, age two years four months. We're sure Claire will be a great help to his Daddy in a few years.

was 2-1 in favor of Chicago. We had some ball games too.

The Secretary of Agriculture visited our camp Monday afternoon and was greeted by the Club members from every section of the United States. A banquet was held in the Chamber of Commerce Building on Saturday evening. We had club speakers from every part of the United States, who told us about things in their part of the country.

We had one Indian girl in camp, Zella Childers, from Oklahoma. She gave a very good talk about the Four-H's of club work and how the Indians believe in them too. A Vermont boy told about making maple sugar; a Kansas boy about raising wheat; a Georgia boy about how he grew cotton; and a Texas boy all about Texas. The Nebraska delegation sang "Springtime in the Rockies," while the Dixie boys and girls sang negro spirituals and danced the Virginia Reel.

Little Folks

We learn why Brown Bear smiles. Here are some of the very good poems that were submitted in our recent contest.

Mr. Brown Bear laughs
From ear to ear.
Which seems to say,
Now don't you fear.
Sara E. Shack.

Here sits a jolly old bear,
With a fur coat so warm and snug.
But be careful! When you're not aware,
He may give you a big "Bear Hug."
Helen Minnis.

Dear Bruin, our old brown bear,
The laughs he gives us are not so rare.
Sulks, they come with ups and downs;
But all his smiles outnumber his frowns.
Ruth Levine.

The laughing bear is to us
A great example, showing thus:
That every time we laugh or smile,
One comes returning, all the while.
Ellie D. Leaman.

A little brown bear once laughed and played,
Happy and care-free and gay;
Too far from his den one day he strayed
Now in a cage he must stay.
Audrey M. Trego.

A laughing bear is never sad,
But is always happy and gay.
He's jolly and rollicking all the time,
For he laughs all his sorrows away.
Elinor Smith.

This laughing bear is very nice,
To that you'll all agree,
Each day I hunt his picture up
To see him smile at me.
Gerald Fisher.

"Brown bear, why are you laughing?
Brown bear, why are you glad?"
"Oh, little girl if you're happy,
You don't have time to be sad."
Grace Griffith.

PASSING EVENTS IN PICTURES



1. Mr. Nelson Abigail Rockefeller, son of John D. Rockefeller, Jr., with his bride, the former Mary Todhunter Clark, following their wedding at the St. Asaph's Episcopal Church at Bala, a suburb of Philadelphia. The bride is the daughter of Mr. and Mrs. Percy H. Clark.

2. Some of the college naval reserve officers on the deck of the U. S. S. Wyoming just before it sailed for a training cruise to the Azores. Students from Harvard, Yale, Northwestern and University of California composed the student crew during the cruise.

3. Colonel Charles A. Lindbergh with Admiral Richard E. Byrd, two of the world's most famous fliers, who met at Byrd's headquarters in New York to exchange felicitations.

4. The usually placid plaza of the Department of Agriculture Buildings at Washington witnessed a strange scene of battle recently as the husky farm boys who have been camped there as guests of the Department celebrated the ending of the Four-H Club camp by a monster pillow fight.

5. Irvine, Cal.—Dr. Albert A. Michelson, noted scientist and "wizard of light," taking the first opportunity after his arrival here to test the mile-long vacuum tube and its accessories with which he hopes to be able to determine the exact speed of light.

6. Will Rogers, famous humorist, was present at the Curtiss Airport and handled the starter's flags for the good will flight to be made in connection with the National Air Races to be held at Chicago in the fall.



From chicken shed to poultry plant

Little Falls. Mr. Fox and his father, starting in 1920 with Leghorns, became interested in better breeding, and in ten years have brought their average from 140 to 200 eggs per bird through selection and breeding, won two New Jersey Egg-Laying Contests in one year, and are always among the leaders in such contests. Mr. Fox stated that their breeding work has always been directed toward producing an ideal bird, seeking not merely high production, but also large eggs, vigor, and the ability to transmit these tendencies to the offspring. Mr. Fox advised poultrymen to determine the weakest point in their birds



SUMMER CHICKS

OF BEST QUALITY

Continue cold and live aerial acrobatics
 feed summer chicks to best for
 table broilers, winter meat and spring
 egg layers and ready to hatch
 self-pickers 40 breeds to order. A taste free

NABOB HATCHERIES, Box 22, GAMBIER, OHIO

When writing Advertisers please mention The Pennsylvania Farmer

FARQUHAR POTATO DIGGERS

SAVE TIME, LABOR AND EXPENSE

Get the potatoes easily, quickly and with least possible shelling and bruising. The "Success Junior" is designed for the small grower. Low cost and pays for itself the first year. Every farmer should have a "Success Junior."

We also build the Farquhar Elevator Digger—the original Rigid Tongue Digger. Designed for the larger grower. Gets all the potatoes and leaves them in an even row easy to pick. Strongly built and priced within reach of every grower.

Write for Illustrated Catalog.

A. B. FARQUHAR CO., Limited
YORK, PA. BOX 246

Horse too lame to work?... Reach for ABSORBINE

Effective Absorbine quickly relieves muscles, sore and swollen from overwork. Pulled tendons, strains and sprains respond promptly to it. Won't blister or loosen hair—and horse can work. Famous as an aid to quick healing of gashes, sores, bruises, \$2.50 a bottle at all druggists. W. F. Young, Inc., 354 Lyman St., Springfield, Mass.

WHEAT for Seed

Pure, sound, hardy, carefully graded, absolutely clean, heavy yield. Product 5 to 10 more bushels per acre. Lancaster County growth. Delivered low seed. High price. Freight paid. One pound. Samples.

A. H. HOFFMAN, Inc., Box 455, Landisville, Lancaster Co., Pa.

CRAWFORD COUNTY, PENNA.

Best Place to Buy Cows—Why not buy your milk producing cows now before they have been picked over and while the supply is good? Prices are much lower than last year and we have many excellent offers. Plenty of better cows. Write us your wants. Efficient service without cost to you.

Crawford Co. Co-Op. Dairy Imp. & Sales Ass'n, Market House, Meadville, Pa.

DAIRY CATTLE

5 JERSEY BULL CALVES—aged from 1 to 3 months. Excellent type. Solid color. Straight backs. Long and deep bodied. All grandsons of old Shiloh's candidate. Priced at \$25.00 each for quick sale. Federal Accredited Herd and blood tested. Highland Farms, Greensburg, Pa.

MASTERS' JERSEY BULL CALVES—ready for service. Accredited Herd. The tankards have many tested dams. Cannot be beaten for show or production. Only Special Discount. **BONO FARMS, Troy, Pa.**

BEAUTIFUL, solid color Jersey bull calf, 4 wks. old, and registered. Fine, sire accredited herd, \$25.00. **W. F. McSparran, Furness, Pa.**

Registered Jersey Bull, 11 months old. Dam's record 607 lbs. butter. Accredited herd. Write to: **J. M. MAIN & SONS, Shippensburg, Pa.**

AYRSHIRE CATTLE of the best blood lines. Herd T. B. Accredited. Animals of both sexes and all ages. **Oco. B. McCannell, Wellington, Ohio.**

PURE-BRED QUEENSBY HEIFER CALVES and **SHETLAND PONIES**. **STEPHEN KELLOGG, Bardonia, N. Y.**

Holstein Bulls—for sale from an accredited able age. From R. P. O. P. 52, the 1,100 lb. butter and 47 lbs. milk. Also females.

Holstein Bulls—for sale from an accredited able age. From R. P. O. P. 52, the 1,100 lb. butter and 47 lbs. milk. Also females.

Holstein Bulls—for sale from an accredited able age. From R. P. O. P. 52, the 1,100 lb. butter and 47 lbs. milk. Also females.

Holstein Bulls—for sale from an accredited able age. From R. P. O. P. 52, the 1,100 lb. butter and 47 lbs. milk. Also females.

Holstein Bulls—for sale from an accredited able age. From R. P. O. P. 52, the 1,100 lb. butter and 47 lbs. milk. Also females.

Holstein Bulls—for sale from an accredited able age. From R. P. O. P. 52, the 1,100 lb. butter and 47 lbs. milk. Also females.

Holstein Bulls—for sale from an accredited able age. From R. P. O. P. 52, the 1,100 lb. butter and 47 lbs. milk. Also females.

Holstein Bulls—for sale from an accredited able age. From R. P. O. P. 52, the 1,100 lb. butter and 47 lbs. milk. Also females.

Holstein Bulls—for sale from an accredited able age. From R. P. O. P. 52, the 1,100 lb. butter and 47 lbs. milk. Also females.

Holstein Bulls—for sale from an accredited able age. From R. P. O. P. 52, the 1,100 lb. butter and 47 lbs. milk. Also females.

Holstein Bulls—for sale from an accredited able age. From R. P. O. P. 52, the 1,100 lb. butter and 47 lbs. milk. Also females.

How to Patent Fruits and Plants

By S. W. FLETCHER

THE following is quoted from the Townsend-Purnell amendment to the Patent Act, approved by President Hoover on May 23, 1930.

"Every patent shall contain a short title or description of the invention or discovery, correctly indicating its nature and design, and a grant to the patentee, his heirs or assigns, for the term of seventeen years, of the exclusive right to make, use, and vend the invention or discovery (including in the case of a plant patent the exclusive right to asexually reproduce the plant) throughout the United States and the territories thereof, referring to the specification for the particulars thereof. A copy of the specification and drawings shall be annexed to the patent and be a part thereof.

"Any person who has invented or discovered... and asexually reproduced any distinct and new variety of plant, other than a tuber-propagated plant, not known or used by others in this country, before this invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, or more than two years prior to his application, unless the same is proved to have been abandoned, may, on payment of the fees required by law, and other due proceeding had, obtain a patent therefor.

Other Requirements

"No plant patent shall be declared invalid on the ground of non-compliance with this section if the description is made as complete as is reasonably possible.

"The applicant shall make oath that he does verily believe himself to be the original and first inventor or discoverer of the... variety of plant, for which he solicits a patent; that he does not know and does not believe that the same was ever before known or used; and shall state of what country he is a citizen.

"Notwithstanding the foregoing provisions of this Act, no variety of plant which has been introduced to the public prior to the approval of this Act shall be subject to patent."

A patent attorney, specializing in services to Agriculture and Horticulture, supplies the following:

"It thus appears that discoverers or introducers of new varieties of plants reproduced asexually (by cuttings, buds, bulbs, etc., rather than from seeds) may obtain exclusive rights to reproduce and sell their creations for seventeen years. Tubers (in the strict sense) are excluded.

Our Own Discoveries

"Plants on which patents are obtainable must not have been known, used by others before discovery or development by the applicant, nor described in any printed publication either here or abroad more than two years prior to date of patent application. No plant actually introduced to the public prior to May 23, 1930, will be eligible for patent. Varieties developed or discovered prior to May 23, 1930, but distributed to others for purposes of experimentation or propagation, and not sold, may be eligible for patent.

"The actual discoverer or developer must make application for patents on his own discoveries or creations. Employers may protect themselves by having employees make assignments to them covering all new varieties developed. This is common practice in research laboratories. When patent applications are accompanied by assignments, patents may be issued in assignee's name.

"There is no advantage in delaying the date of application and there are frequently important disadvantages. All applications and all information concerning them are held in strictest

secrecy until the patent is either granted or refused. The following possible disadvantages of delay in making application are noted:

"(1) Some other person may have secured cuttings from the new plant, or may actually create or discover a closely similar plant and by applying promptly greatly complicate the task of securing the patent for the rightful originator or discoverer.

"(2) The two-year time limit will be expiring soon on some plants that have been described in print nearly two years ago.

"(3) At present it takes about 18 months to get a mechanical patent. It will probably take much less time to get a plant patent, but considerable time must be allowed. Any person

desiring to advertise a plant next season as 'patented' must proceed with the patent, application with utmost speed.

"An applicant for patent may draw up his own application and specifications, but they must be made out according to certain forms and the final value of a patent frequently depends upon the skill with which the claims are drawn. An applicant may make his own illustrations, which must be of a certain size and on certain kinds of paper, sometimes in true color and sometimes in black and white. However, few who are not thoroughly familiar with the Patent Office and its rules of practice obtain patents unassisted. The Patent Office is now making new rules and regulations applying to plant patents.

"Ordinarily it will not be necessary for the applicant to come to Washington in order to secure his patent. It may not always be necessary to send his specimen."



Success with grapes requires that they be pruned each year and that they have a trellis strong enough to hold them off the ground. The illustration shows a neatly kept trellis or arbor. Cedar posts were placed in the ground and iron pipes run through holes in the posts. The vines are then tied to the pipes and this makes a very substantial grape arbor. Lancaster county, Pa. Luke W. Martin.

The Last Wild Pigeon

Dear Sir:—

I have before me a copy of Pennsylvania Farmer dated April 12th, 1930. The article "The Pigeon Mystery" interests me. I am familiar with the life habits and final disappearance of the passenger pigeon.

"Etopistes migratorius (Linn.), commonly called wild pigeon. I have a letter from Mr. S. A. Stephan, general manager of the Cincinnati Zoological Garden, Cincinnati, Ohio, which he wrote me at the time of the death of the last passenger pigeon which they had in captivity in which he says: "The last survivor, female, died at two o'clock p. m. on Saturday, August 29, 1914, it being the last of a flock of seventeen that was captured in the year 1876." I am inclined to think the wild pigeon the article refers to is the hard-tailed pigeon. I would be pleased to know definitely about the variety. The passenger pigeon length (depends on the tail development) is about 14 inches, extent about 25 inches, tail has 12 feathers. The mourn-

ing dove, also called turtle dove, has 14 feathers in the tail and can possibly be confounded with the passenger pigeon. I will enclose a picture of a mounted passenger pigeon now in my possession. The bird was killed November 5, 1890, about seven miles west of this city. It is one of the last if not the last passenger pigeon killed in this state.—Charles H. Eldon, 319 Locust Street, Williamsport, Pa.

Editor's note:—Mr. Eldon is correct in his surmise that the California wild pigeons mentioned in our issue of April 12th are of the band-tailed type, not the supposedly extinct passenger pigeons. Correction of the erroneous reports from California was made in an editorial published May 24th.

Farm Editors in Canada

(Continued from page 8.)

but it is doubtful if it has much above ground, aside from furs, to offer the white man. A short distance north of the city of Quebec lies Lamentides Park, where game and fish are said to be plentiful and fairly convenient to reach. This stretches across both sides of the divide, or parting of the ways, between the rivers which flow south into the St. Lawrence and those which flow north toward Hudson Bay or the Atlantic.

Fifteen years ago Quebec was mostly "in the mud" as far as roads were concerned. Now it has 12,000 miles of permanently improved highway and 15,000 miles of graded earth roads passable under all weather conditions. Motorists from this country find the picturesque towns and farm homes very attractive.



American Dairy Science Ass'n Meeting

By A. A. BORLAND

AMES, Iowa, was the Mecca for dairy scientists June 24 to 26 when the annual meeting of the Association took place. Over 200 members were present for the sessions, part of which were devoted to each of the five sections—production, manufacturing, extension, official testing and dairy economics.

Many topics of interest were presented in brief papers followed by discussions. Some of the more interesting to Pennsylvania Farmer readers are summarized:

The Dairy Situation

The Economic Situation of the Dairy Industry was presented by Roy Potts of the U. S. Bureau of Agricultural Economics. Since the crash in the stock market last November, industry has been suppressed, unemployment has increased and the price trend of all commodities has been downward. Butter prices have been running from 7 to 14 cents less per pound than a year ago and cheese about three cents less.

There has been a decrease of 2½ per cent in butter production during the first four months of the present year as compared with the similar period last year, a decrease of 4.7 per cent in condensed and evaporated milk but an increase of 8.2 per cent in cheese. The amount of butter in storage has been running from 20 to 35 million pounds greater than a year ago, there being 50 million pounds in storage now as compared with 28 million pounds in June, 1929. The amount of cheese is about the same as last year.

The large amount of unemployment at present is what makes the bad economic situation in dairying. The dairy business is suffering more from underconsumption rather than overproduction and will improve as soon as business conditions improve, which return is expected to take place during the latter part of the year. Now is the time for dairymen to cull out unprofitable cows, send a large percentage of calves to the butcher and use a good sire since they can now be purchased cheaply.

Water Bowls Increase Milk Production

C. Y. Cannon of the Iowa State College presented the results of experimental work to determine the value of individual water bowls providing a constantly available supply of water vs. outside tanks from which the cows were watered twice daily. The water cup groups of cows drank 18 per cent more water and produced six per cent more milk and 12 per cent more butterfat than the outside water tank groups.

Sunshine Puts Vitality into Milk

The influence of sunshine on the growth and on the milk of heifers was discussed by T. M. Olson of the South Dakota College. The no sunlight group of heifers grew faster than the sunlight group of heifers but when the latter freshened and four to eight pounds of their milk was fed to growing pigs daily, the pigs made faster growth than those receiving a similar amount of milk from the no sunlight group of heifers.

The Relation of Yield to Net Returns

J. C. McDowell of the U. S. Dairy Bureau has found from tabulating the production records of cows in dairy herd improvement associations that the cow yielding 100 pounds of butterfat returns on the average \$13 income over feed cost. The 200 pound cow returns \$53, the 300 pound cow \$90, the 400 pound cow \$130, and the 500 pound cow \$169 over feed cost. In

other words increasing the production five times increases the net return over feed cost 13 times.

Cottonseed Meal for Dairy Calves

Professor Earl Weaver of the Oklahoma Station has fed cottonseed meal as the sole concentrate to dairy calves. As much as 2.5 to 3.0 pounds of cottonseed meal daily has been fed five-month-old calves. While the calves did not make normal gains in growth yet the results indicate that the toxicity of cottonseed meal has been over-estimated. From six to seven pounds of cottonseed meal was fed daily during the gestation period of heifers and from nine to 14.5 pounds daily during lactation without harmful results.

Grinding Roughage

L. H. Fairchild of the Letz Manufacturing Co. summarized the present information on the grinding of roughage. Digestion trials at experimental stations indicate that grinding hay does not increase its digestibility. Recent experiments by the Company show that the principal advantage of roughage grinding is when corn stover or other coarse stemmy roughage is used. In such cases a much higher percentage of the feed is consumed if it is ground. The speaker presented figures to show that roughage can be cut or ground at a cost below \$2 per ton.

Nearly one hundred papers were presented covering all phases of the dairy industry. The retiring officers are: J. M. Sherman, Cornell University, president; H. C. Jackson, University of Wisconsin, vice-president; R. R. Groves, U. S. Dairy Bureau, secretary-treasurer; and A. C. Dahlberg, Geneva, New York, editor. The nominees for president to be elected by mail ballot for the ensuing year are H. A. Ruehe, University of Illinois, and H. B. Ellinberger, University of Vermont. The meeting next year will be held at the University of California, Davis, California.

First A. R. Testing

HENRY H. WING of Ithaca, N. Y., was chosen to head The Holstein-Friesian Association of America for the coming year at the Denver meeting in June.

Although born in New York City, Mr. Wing was farm reared and is now 70 years of age. He personally supervised the first official records made under the Advanced Registry System on the farm of Henry Stevens & Sons in the summer of 1894.

A UNADILLA SILO will boost your milk profits all next winter!

Stored safely away in a Unadilla Silo your corn will be the juiciest, most palatable and nutritious green feed possible to provide in winter. Appetizing feed which will increase milk flow and profits and save cost of dry feeds.

If you are facing a short hay crop make the most of your corn crop by harvesting it into a Unadilla. Your stock will appreciate and respond generously to the change.

Write at once for large illustrated catalog and prices. Shipment of any size Unadilla can be made at once in either Oregon Fir or Spruce. Liberal cash discount for cash on delivery. Time payments also. Address,

UNADILLA SILO CO., Inc., Box P, Unadilla, N.Y.

We are sales agents for Paper and Russell-Trojan Cutters in non-competing territory. Write for catalog and prices.



BIGGER SUMMER MILK CHECKS with B-B 20% Hi-Test Dairy Feed

WITH green pastures, cows need a balanced ration for top-notch milk production. And with pastures slowly drying up, they need it more than ever.

Feed B-B Hi-Test Dairy Feed now. This economical 20% protein feed contains the right variety of minerals, vitamins and other needed milk producing ingredients. B-B Red-E-Mix is another excellent 20% dairy feed for summer use.

We Guarantee Most Production

The perfect balance of these feeds insures a longer lactation period and perfect physical condition. Feeding it now means maximum production both now and later on.

We guarantee B-B Dairy Feeds most productive per dollar of feed cost—or money back.

Maritime

Milling Co., Inc.
Buffalo, N. Y.

BULL BRAND FEEDS
DAIRY AND POULTRY

Buy now. Pay later

A MONEY MAKER

Better feed—lower costs—more profits. Booklet "Users Own Words" written by owners proves it. Write for free copy. Write your name and check below items for illustrated folders.

The Ross Cutter & Silo Co.
167 Warder St., Springfield, O.
Established 1850

Stations
Cribbs
Broader Houses

PHILA SILOS

In Wood-Concrete-Tile.

Price Catalogue, Special Prices Now.

E. F. SCHLICHTER CO.,
10 S. 18th St., Phila. Pa.
Tanks, Blower Houses, Farm Equipment

350—COWS—350

—T. B. and Blood Tested—

Two Hundred Holstein and Guernsey cows for sale. Can be seen any day in pastures near our yards. 150 West Wisconsin Ave. in our Auctions every Saturday. Every cow T. B. and blood tested to go anywhere.

WISCONSIN DAIRY CATTLE MARKET.
Troy, Wis.—On Soo Line.
45 Miles S. W. of Milwaukee, 35 Miles N. W. Chgo.



Here's a STOCK SPRAY that Kills and Repels

Preferred by leading dairymen everywhere, Tanglefoot Stock Spray kills and repels flies and other insects—protects cows all day in barn or pasture. It is pleasant to use—never stains, discolors, or gums the hair—and won't burn or blister the hide. Milking and feeding are easier because cows and other animals are unmolested and quiet. You get more and better milk—larger cream checks. Tanglefoot will not taint milk—is powerful, lasts longer, goes farther—works equally well on horses, hogs and other farm animals. Try Tanglefoot. We guarantee you'll like it. Leading dealers everywhere sell this remarkable stock spray. Write for free, interesting booklet.

THE TANGLEFOOT COMPANY
Grand Rapids, Michigan

TANGLEFOOT STOCK SPRAY

Listen in on the Tanglefoot program on WLS Friday evenings, 8:15 Daylight Saving Time, 7:15 Central Standard Time.



Whether it is a dairy feed or a mash, for hogs or horses, Arcady Wonder Feeds are the finest you can buy—mixed by special formulas to give your stock and poultry the maximum in feeding. Your dealer carries Arcady Wonder Feeds. See him today or write us direct.

ARCADY FARMS MILKING COMPANY
Dept. 32 Brooks Building, Chicago, Ill.

FREE WRITE TODAY FOR NEW POULTRY BOOK

Less than 2¢ PER RUNNING FOOT

New Kind of Fencing

Lower Prices on Farm and Poultry Fences

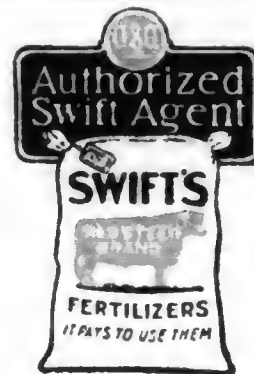
Get the Superior Steel Fence and Electric Fence. Perfectly insulated as tested in 100 years. Sold with no loss of secondary current. See you NOW! (Money from Farmers' Day Fences). Easy Payments. Write for new free catalog today. —Jim Brown.

THE BROWN FENCE & WIRE CO., Dept. 27111 CLEVELAND, OHIO

**This fertilizer
is always sold under a
Certificate of Quality**



*For your protection look for this
Certificate when buying fertilizers.*



*Look for
this sign
of your
A. S. A.*

Have your Authorized Swift Agent
tell you how you can get your plant
food for less money with Red Steer
High Analysis 4-16-4 or 4-16-10,
recommended for wheat.

*You save on labor, freight, haul-
ing, and bagging.*

DO you put all your faith in "guaranteed
analysis" when you buy fertilizer?
"Guaranteed analysis" is important. *But it
can't tell the whole story.*

Guaranteed analysis can tell you only the
amount of plant food in the bag. But the
Swift Certificate of Quality, attached to every
bag of Red Steer Fertilizer, gives you in addi-
tion a definite, dependable assurance of
quality.

For it assures:

BEST MATERIALS—plant food from the
most productive sources.

DOUBLE MIXED—fertilizer thoroughly
and evenly mixed and in good drilling condi-
tion so that each plant will get its share of
plant food.

TRIPLE TESTED—in modern labora-

tories, assuring the right plant food in the
right form and amount.

Look for the Swift Certificate of Quality,
your definite, dependable guide to quality.

Swift's Red Steer Fertilizers, backed by the
Certificate of Quality, bring large yields of
plump, premium wheat, maturing 3 to 10 days
earlier. Greater freedom from rust and less win-
ter killing. A good clover catch and more hay.

You can buy this fertilizer with confidence.

Ask your A. S. A. (Authorized Swift Agent)
for our free booklet on fertilizing wheat. Or write
direct to the nearest Swift & Company office.

Swift & Company
Fertilizer Works

Baltimore, Md.

Cleveland, Ohio

Swift's Red Steer Fertilizers

"It pays to use them"

BEST MATERIALS - DOUBLE MIXED - TRIPLE TESTED

PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

July 26, 1930



Philadelphia

Pittsburgh

Harrisburg



You Can Get This Cleanest and Brightest-Burning Kerosene

WHETHER used for lamps or lanterns, for cooking, heating or power, Freedom Kerosene, made from 100% Pennsylvania Crude Oil, is better. This superior fuel burns with a clear, clean, hot flame that gives most light or heat per gallon consumed. For tractor or other engine use it has power and pep far beyond that of ordinary kerosene. For use with insecticides, or fungicides, it has no equal.

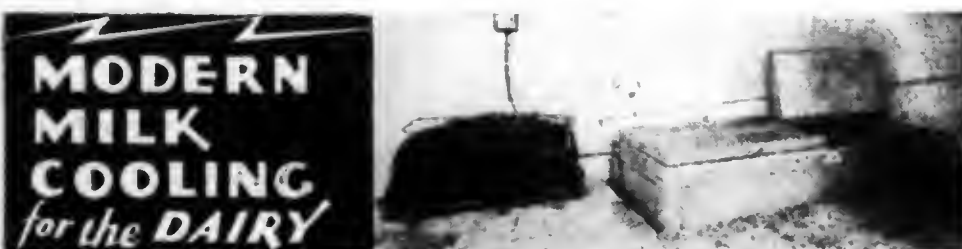
PS And for your Motor Cars Trucks and Tractors. FREEDOM Ethyl Gasoline FREEDOM Golden Gasoline FREEDOM Perfect Motor Oil FREEDOM Tractor Oils

Everybody cannot get Freedom Kerosene. But if you live in the territory shown above our trucks will make prompt delivery right to your door at no increase in price.

There is a Freedom branch located in every city shown on the above map. Phone or write the nearest branch for a trial order of Freedom, the better grade Kerosene, sold at no extra cost.

THE FREEDOM OIL WORKS CO. FREEDOM, PENNA.

FREEDOM KEROSENE



HOT weather means little to the dairyman with an ESCO Milk Cooling Cabinet. He gets the highest premium for quickly cooled milk keeps bacteria down and reduces labor and costs. He merely plunges the can of milk into the ice-cold water in the cabinet and leaves them there until delivery time.

Model B (electrically operated) cools milk quickly to below 32 degrees. Automatic and efficient.

Model C is the same as Model B but with a built-in pump and a 1/2 horse power motor. It is also electrically operated.

ESCO Cabinet Co., West Chester, Penna.



Farm Facts and Fancies

By ALVA AGEE

ONE should take time now and then to express his admiration for Chairman Legge of the Farm Board. His recent trip into the winter wheat region of our western states was such an occasion. He knew that his message to make a drastic cut in area seeded this fall would not be pleasing to many. When he accepted the chairmanship of the Board he left a big business in which his work was to his taste and deliberately subjected himself to the criticism of business men who did not believe in the Farm Board law, and to the criticism of farmers who wanted results that Mr. Legge knew no legislation could give. He believed some good could come out of the financing of pools and some holding back of wheat, and he yielded to solicitation that he do what he could. Surely he must often think of the price he pays for his attempt to do his duty.

Nothing Else to Do

A neighbor called the other evening, and as he and his brother own four thousand acres of wheat land in western Canada naturally we talked wheat. This land lies in several blocks, and is farmed by renters to whom equipment is furnished. I asked him what could be substituted for wheat on this acreage, and his reply was, "Nothing can take its place. With us it is wheat or nothing. A hundred miles north of us is land that has water and grows grass, and its owners are in the cattle business. Hay is made for wintering, and these men do fairly well, but all that is out of the question for us. There is nothing to substitute for wheat on our four thousand acres of land, and its value depends wholly on ability to make wheat pay its cost of production and a bit over. No, it is wheat or nothing."

I mention this one instance as a fair illustration of the plight of the owners of a vast total area in the Northwest. There is some land that can be given to flax, barley, etc., and there can be mixed farming in a great part of the grain-growing region within our own country, but as one goes north in western Canada he finds developed and undeveloped farming lands of immense extent that have no particular value except as they may be used for growing wheat. It is "wheat or nothing," and who consents to regard his land as worth nothing so long as there is a chance of wheat paying cost of production? It is a paying to bear in mind as we consider control of wheat acreage.

Goods on Hand

When the panic of 1920 came we were badly overstocked with manufactured goods, and the recovery was slow because it took a long while to consume that surplus and make a demand for new supplies. Our economists have been telling us that we were far better off now because no burdensome stock of goods was on hand when demand slumped in the latter part of 1929. It is only recently that one of these authorities seems to have awakened to the fact that we did have a great excess of supplies after all, but it was not in the usual places when panics come.

The manufacturers and the distributors did not have any great surplus on hand, except in the case of two or three industries, but the country did have overproduction. It had been moved into the hands of the public through installment buying, and in its vast bulk stood in the way of new buying. It was overproduction because the public did not have ability to pay for it and should not have let it be moved out of the hands of manufacturers into their hands.

A big surplus of products did exist, just as it does before most periods of dull times, and the only difference was that consumers were storing and using it when they were not financially

able to do so. It follows that we shall wait for recovery of good buying power this time just as we have in other similar times. It seems obvious enough now, but it took a long time fully to appreciate the fact.

The Ant and the Aphis

A subscriber writes that the Winter Maiden Blush apple trees in his orchard suffer serious aphis injury each year. He says: "I have been wondering for a long time whether it would be practicable to eliminate aphis injury in orchards by poisoning ants, but have never heard any of our horticultural authorities mention it."

What I wrote may have been misleading. In our garden we do count on the control of the ants as an aid in the fight against the aphis, but depend on nicotine sulphate for destroying the aphis. Both horticulture and entomology are outside of my field of knowledge, but infestations of aphids must be fought by dusting or spraying, and the only thing is to ask one's experiment station to advise the best application to make.

"Let the Buyer Beware"

A city physician, who describes himself as an "amateur farmer," was interested in something said a few weeks ago on this page about the puzzle of determining where honesty leaves off and undue self-interest begins when trying to make a sale. He writes: "Let the buyer beware" does not go on my farm. Three months ago I bought a kicking mare, and the owner wouldn't let me pay for her on Sunday. When I found her out, I undertook to sell and told every one her faults. My son finally did sell her and I was very proud of him when he said, 'Dad, I told that man everything about the mare. I hitched her up and made her kick, and not only that but she kicked at me in the pasture while he was standing by.'"

My vote is cast for that young man. He is getting the right training. Now some will say that it is so unusual to be told all the faults of anything one thinks of buying that naturally he supposes it is worse than it is. That is true. For a long time I have kept in my locker at the roque courts a mallet that never has been used a great deal. It is a good mallet, too, but I ordered a better one in the rather vain hope that it would improve my game.

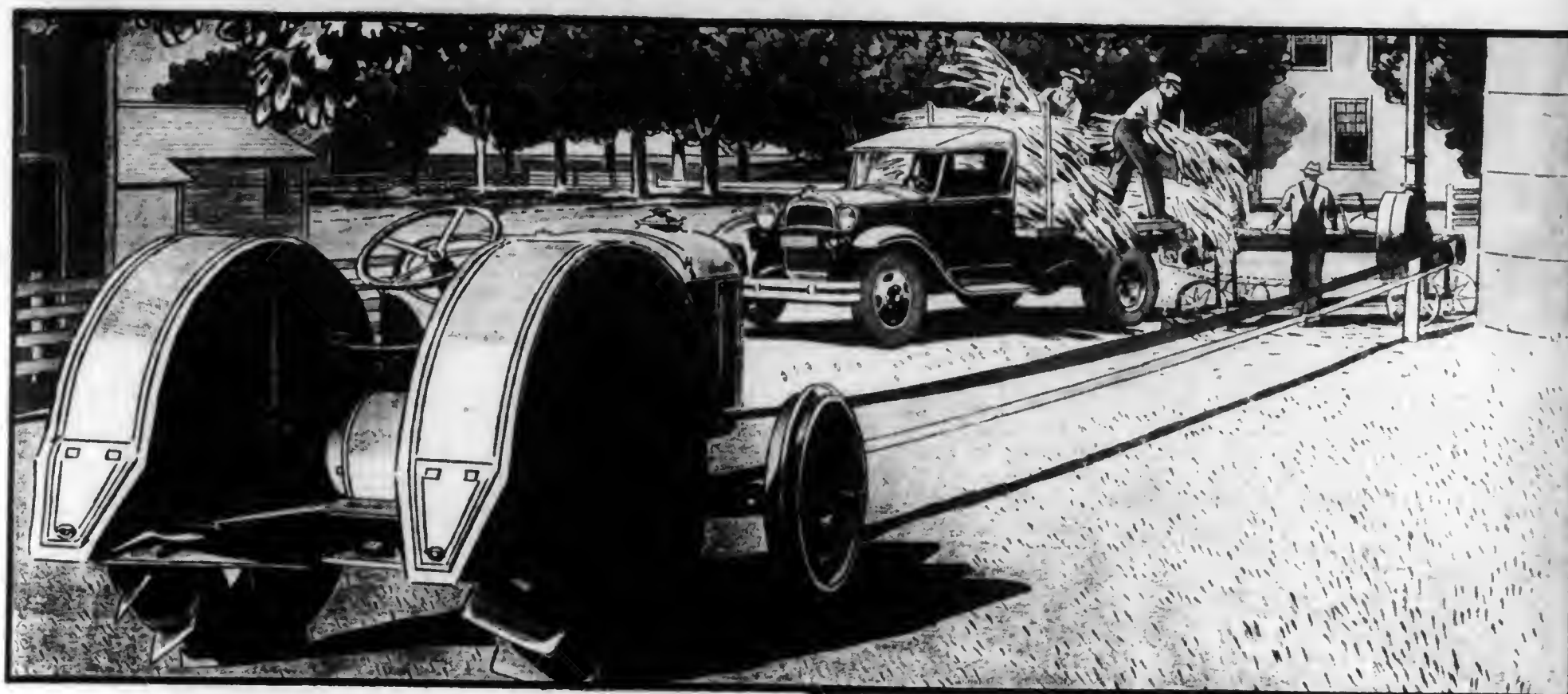
Many times a beginner has come to me saying he understands I have a mallet for sale. I offer it to him at four dollars while first cost was eleven. He asks me whether it is all right and I point out that it is two ounces heavier than I like and the head is a half-inch longer. He tries the mallet for a day and always returns it later with some excuse or other, but back in his mind may be the wonder how worthless it must be in view of the admissions I have made.

Apple Pomace as Fertilizer

NOTICE that J. W. Bovard desires to know if apple pomace will make a good fertilizer. My experience has taught me that apple pomace is an injury to any kind of soil. It contains too much acid and makes the ground hard and sour. I learned this when at home on my father's farm. We had an old-fashioned cider press where cider was made in large quantities. The result was a large pile of apple pomace every year.

We hauled quite a lot on a field one fall. It made the ground hard and sour and seemed to kill all the fertility in the soil. We had to lime that ground and use plenty of good farm yard manure.

To get rid of apple pomace haul it out in some spot where you might have some Canada thistles and apply it heavy as an experiment. H. S. Blair county, Pa.



Reduce your cost of production with a FORDSON

JIM LEE is filling his silo today. Neighbors and helpers on hand at the crack of dawn. All there and ready to buck into the work . . . including the Fordson Tractor.

Yesterday the improved Fordson plowed 6 acres. Tomorrow it will be back at the plow again after a good day at the belt. This spring and summer it pulled the gang-plow, the drill, the binder. This winter it will turn the buzz-saw and do other odd jobs around the barn. Uses for the improved Fordson are as numerous as the farm-power jobs. New and modern features help the improved Fordson do its work quickly, easily.

Its plucky engine can deliver 30 actual horse-power at 1100 r.p.m. at the belt. The willingness of the engine to start, even on the coldest of mornings, can be traced to its high-tension magneto with enclosed impulse-starter coupling. It is equipped with hot-spot manifold and carburetor for gasoline. The air-washer holds enough water for the day's run.

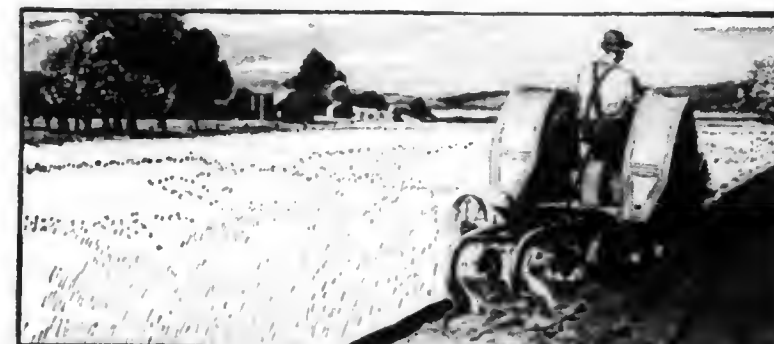
The transmission is fitted with large roller bearings and the large gear has a double-bearing mounting. Gears shift easily from increased release movement. The filter that separates grit and carbon from the oil is easily cleaned—but should it get clogged, oil system will keep right on working. There is no complicated piping to get stopped up!

Extra weight has been added to the front and rear of the improved Fordson. Strong fenders are now standard equipment. Either spade-lugs or angle-cleats are available.

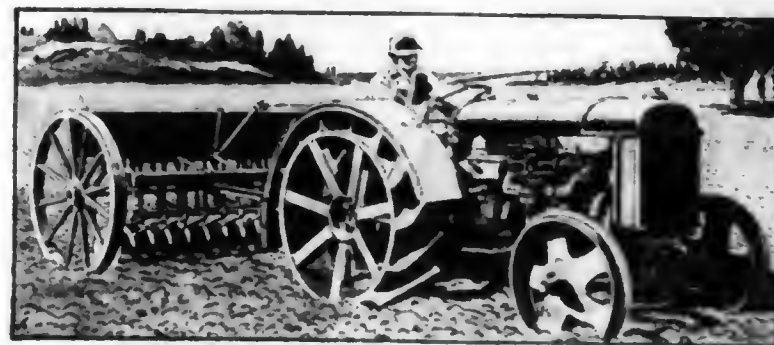
Try the improved Fordson. Let it help you get your farm-work done on time and at less cost.

FORD MOTOR COMPANY

G. M. STULL CO., CHESTER, PA.



The improved Fordson plows at the rate of 3 1/2 miles per hour with a two-bottom, 14-inch plan



The improved Fordson handles all farm-power implements equally well



Not only draw-bar power, but belt power, is available in the improved Fordson

PENNSYLVANIA FARMER

Published Weekly
Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published Every Saturday by
CAPPER-HARMAN-SLOCUM, INC.
2301 Penn Ave., Pittsburgh, Pa.

President Arthur Capper
Vice-Presidents T. D. Harman, Geo. M. Slocum
Manager Neil Laine

Editorial Staff
Editor-in-Chief E. S. Bayard
Editors C. L. White, N. G. Gilpin
Field Editors Miles Horst, G. W. Harris

EDITORIAL OFFICES
Pittsburgh Harrisburg Philadelphia

CONTRIBUTING EDITORS
R. P. Keister J. G. Lipman
Alva Ager H. C. Kandel
L. W. Lighty R. L. Scharring-Hausen
R. C. Wasingame A. A. Borkland
J. F. Shigley S. W. Fletcher
W. D. Zinn Mrs. Gertrude Stewart
F. L. Bentley Gilbert S. Watts

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Canadian subscriptions Fifty Cents per year extra for postage

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for livestock and classified advertising. No deceptive, immoral or swindling advertisement inserted at any price.

Member Agricultural Publishers' Association.
Audit Bureau of Circulations.

Volume 103, No. 4 Established 1877

LAMB FUTURES

A METHOD of dealing in feeding lambs for future delivery was inaugurated by the Chicago Livestock Exchange last week. The success of future trading in hogs and the demands by sheepmen for the same opportunity of selling are said to be the reasons for establishing "lamb futures." Ten different kinds and weights of feeding lambs will be traded in for August, September and October delivery. We would expect this to be of more interest to eastern farmers than the hog futures market, and it will benefit western producers who should welcome anything that promises to take the gamble out of their business.

OLD-AGE PENSIONS

THE leading topic under discussion at the 22nd annual conference of state governors, held recently in Utah, was old-age pensions. It is a subject which we are going to hear more about in the future and one on which the public should be thinking and forming opinions. We cannot dismiss it by saying that it would encourage shiftlessness, or it will bob up again and again, because folks are moved by the vision of dependent old age and a good many of them feel especially virtuous when engaged in some kind of reformation. But people who try to shove off on the state or the nation the care of their aged relatives must lack something in self-respect if not in filial affection.

PLANT DISEASES

A BILLION and a half dollars is our annual cost for plant diseases, says Dr. P. I. Harkell, plant pathologist of the U. S. Department of Agriculture. It is estimated that our wheat crop is reduced 97,000,000 bushels yearly by rusts, smuts, rots, etc., that our corn crop is cut 271,000,000 bushels and our potato yield is some 95,000,000 bushels less than it would be if there were no potato diseases. This is surely a big loss, but if it were saved what would we do with it? Overproduction is said to be the cause of our poverty, from which we might conclude that the pests and diseases that harass our souls and reduce our harvests are blessings in disguise, reducing the supply and raising the price. The farmer who sees his crop destroyed by disease or insects would hardly agree. Then can we blame him when he fails to follow the advice of acreage reduction? The destruction by plant diseases is an actual loss to the individual farmer who

appreciates all that scientists have done to enable him to control this yearly toll.

MIGHTY IS THE HEN

A TENTH of the total farm income comes from poultry, says the Department of Agriculture in announcing the results of a survey made by the Bureau of Home Economics. We have six million flocks containing 442,000,000 chickens and they contribute \$1,175,000,000 to the farm wealth yearly. The humble hen enters the realm of big business. She has long been known as the provider of groceries and clothing on farms when other things get more credit but give less income, and we are glad to see her efforts given official and statistical recognition. Poultry is raised on 86 per cent of the farms of this country, including those where the hens do nothing to attract attention except dig up the garden and those where royal lineage and scientific diet portray the respect in which the noble bird is held.

ANOTHER GENTLE ONE

COUNTY Agent Koppenheffer of Cameron county, Pa., writes us as follows: "Last week little ten-year-old Barney Bauer, son of John Bauer of Emporium, narrowly escaped death by an enraged bull. He went into the 2½-year-old Holstein bull's pen to open the door to the outside yard when he was suddenly attacked by the bull, and if it had not been for a German police dog being near the barn and hearing the boy's cries he would have no doubt been killed. The bull was gentle and the boy often fed him green cut grass out of his hands." Again the "gentle bull" and the faithful dog. We recently learned of a child being nearly killed by a police dog, but we have never heard of a person being rescued by a bull. This does not mean that children should be trusted with possibly dangerous dogs any more than anybody should pin faith in a bull. We hope that little Barney Bauer will recover and live to warn many other children and grown-ups to beware the bull.

TOADS TO THE RESCUE

BIRDS are recognized as man's faithful allies in his perennial battle with bugs, but snakes, toads and newts are unhonored by the human race. This oversight on our part may be remedied if a plan now being tried in Texas succeeds. It is the importation of "86 gigantic toads from Porto Rico" to fight grasshoppers, worms and crickets. Since the limit of a toad's consumption seems to depend more on acquisition than on digestive capacity we may question the efficiency of these big amphibians. A gigantic toad should be able to hold more insects than a common toad, but can he catch more? While awaiting the answer we shall depend on spray and dusts, not withholding, however, any credit due the reptile race for its assistance against our six-or-more legged enemies.

REPOPULATED

MOST of the "abandoned" farms in this region should never have been farms. They were farms because in the days of bad roads food supplies were not easily transported to lumber regions, and the need for them led to nearby production in spite of the handicap of unsuitable land. The land was new and it could and did raise things for a while, but it could not compete with real farm land when the local need disappeared and its products had to go to market. So these farms were abandoned as farms, though many of them had good buildings, erected when lumber and labor were both cheap. Now many of these farms are again in use but not as farms. Sportsmen or sportsmen's clubs own some of

them. City people own many of them and use them as summer homes. And the real farms near these so-called farms are benefiting by the demand for products which the new population creates. One county agent, in a county which is becoming a playground for city people, reports that he cannot interest farm boys in club work. They can earn more money on the county's eight golf courses or by helping city folks than in club work. The abandoned farms are being peopled, and more of them will be as our forests and streams are restored and our roads improved. They are not going to compete with real farms but are going to make a market for products and an opportunity for farm boys and girls.

OLD PANACEAS

THE Farm Board's proposal of reduced wheat acreage is met by demands for a debenture plan, an equalization fee and the purchase of grain by the government. While its experience with stabilization corporations has apparently made the Board skittish of price-fixing schemes it has whetted the appetite of those who feel that the farmer can be helped only by artificially raising prices. Thus the "farm problem" is as acute as it was a year ago when the Board was created, and the recent decline in wheat prices has aggravated the situation. We have tried one experiment, and it is not hailed as a success. By the time we try all that have or will be proposed the problem may have ample opportunity to solve itself by readjustment of supply to demand or the farmers die of old age waiting for "relief."

FARM WAGES LOWER

FARM wages usually advance about six per cent from April to July. This year they dropped two per cent during the period. They are still some 47 per cent above pre-war figures, but a year ago they were 60 per cent over the pre-war level. The supply of farm labor is reported as 103.4 per cent of normal, compared with 92.3 per cent of normal a year ago. Unemployment in town has apparently turned workers to the country for employment, which is one reason the labor problem is not so bad on the farm. Another and more important one is the trend toward the use of more machinery and the arrangement of fields and farm operations to save labor. The farmer is solving his labor problem, as he will eventually solve all his problems.

PRODUCE LICENSING ACT

THE produce licensing act has been signed by the President and is now a law. Commission merchants, dealers and brokers who plan to be in business after the tenth of next December must register with the Department of Agriculture. Then if they are guilty of fraudulent charges, unjustified rejection or other "unfair conduct" they can be apprehended and brought to account. This measure was made to protect farmers from irresponsible and dishonest buyers. It should meet the approval of both farmer and reliable dealers and its administration should eliminate one of the most exasperating elements in produce trade.

READ IT FIRST

A WARNING to "read before you sign" is issued by the National Better Business Bureau. Swindling schemes based on getting a signature on a printed slip are an ancient form of chicanery, but always good for separating some gullible person from his money. The victims are said to be as numerous among high corporation officials as among those less versed in business matters. No difference how unimportant a paper is said to be the safe and sensible thing to do is to read it carefully before signing one's name to it.

New Jersey Farm Comment

By G. W. HARRIS

THOSE of us who are not fortunate enough to be able to attend the World's Poultry Congress which is being held in London this summer may listen in on this side of the ocean by tuning our radios in on the National Farm and Home Hour, July 28. Talks will be broadcast from London by short wave and picked up by a network of 35 stations associated with the National Broadcasting Company.

This is another step toward bringing the farmers of the world closer together and giving them a better understanding of each other's problems. Probably the time is not far distant when rural programs broadcast from nations thousands of miles away may be heard on almost any evening.

POULTRYMEN from Middlesex and Somerset counties spent last Tuesday inspecting some of Hunterdon county's leading poultry plants. They stopped at the farm of George Pearce, near Whitehouse, where they saw some birds being raised on free range under nearly ideal conditions. They continued on to Flemington where the Hunterdon County Egg-Laying Contest plant is located. This contest is just completing its first year and already all available pens have been reserved for the new contest which starts this fall.

The Cane Poultry Farm at Rosemont proved of particular interest to the visiting poultrymen. Mr. Cane raises a large number of pullets on free range and sells them at ten weeks of age. Three laying houses, modern in every detail, and summer shelters used to relieve congestion in the colony houses were points of interest.

The last stop was at Kerr Chickeries at Frenchtown. This is one of the largest commercial hatcheries in the United States and is equipped with both the new type electric cabinet incubator and the long type heated from a central heating point.

SUSSEX county Grangers celebrated the silver anniversary of their Pomona Grange at High Point Park last Saturday. High Point Park, 1,877 feet above sea level and the highest point in New Jersey, where one can gaze into Pennsylvania and New York, was an ideal location for this memorable occasion. Twenty-five years of steady growth and increasing service to its rural patrons is the record of the Sussex County Pomona Grange since organizing on June 7, 1905. The first Pomona Grange in Sussex county was organized at Newton by County Deputy Daniel Wyker in 1875, but after a few years became inactive. History of the present Grange can record no such period in its 25 years of usefulness to rural Sussex county.

"There is too much pessimism in talking of our own problems and not enough thinking through them," said L. J. Taber, Master of the National Grange, in his address. He reviewed the program of the National Grange and told some of the things the organization is attempting to do to better the agricultural situation.

Two of the problems facing agriculture today are equalization of taxation and improving our marketing system, he said.

THE Mercer County Board of Agriculture held their annual outing at Washington Crossing on Tuesday.

George Wheaton, delegate to the National Fair-H Club Camp at Washington in June, told the large group of club boys and girls at the outing of his trip and experiences at national camp. Rev. Samuel Stelmets of Trenton, well known many Mercer county rural folks, brought a message of good cheer.

NEW JERSEY farmers were singularly honored last week when two national farm leaders, Samuel H. Thompson, president of the American Farm Bureau Federation and L. J. Taber, Master of the National Grange, spoke at the annual picnic of the Farm Bureau Federation and the State Grange. This meeting, held at Atlantic Highlands on Thursday, drew over 1,000 rural folks from all parts of the state.

President Thompson presented some of the many problems confronting the farmers of today, one of the leading being distribution of farm products. He pointed out that through the present marketing system the margin of cost between the producer and consumer has been steadily increasing—with the result that producers are receiving less and less for their crops to pay for this increasing cost of distribution. In outlining some of the work of the Federal Farm Board he brought out differing marketing problems of the farmers in the Middlewest and in the East.

"It would be a very dangerous policy to place our agriculture on a domestic basis," he said in referring to surplus production. If such a basis were established a year of crop failures due to weather conditions, etc., might prove disastrous.

The need for equalization of taxation was one of the keynotes of National Master Taber's address. He emphasized the need for some relief from the present antiquated system which makes taxes on farm lands a burden.

ROBERT SHOMER, an Atlantic county boy, recently carried off two state-wide honors by winning an essay contest open to boys taking vo-



Four-H Boys and Girls at Camp Roosevelt

cal agriculture in the state and by being named the New Jersey winner of a public speaking contest sponsored by the Future Farmers of America. "Preventing Poultry Diseases" was the essay subject. Robert's \$10 first prize was offered by Dr. Arthur Goldhardt of Vineland while prizes of \$5 and \$3 for second and third place, offered by the New Jersey branch of the Future Farmers of America, were won by Thomas Eastwood, Gloucester county, and Edward Greco, Hunterdon county.

Robert's talent as a public speaker gives him an opportunity to compete with boys from 13 states at a public speaking contest during the Eastern States Exposition, Springfield, Mass., in September. The winner of this contest will compete in a national contest to be held at Kansas City in November during the American Royal Livestock Show.

NEW JERSEY dairymen perfected a state milk producers' association last week which brings together dairymen throughout the state, the Department of Agriculture, the College, and the various dairy breed organizations in a united effort to better dairy conditions in the state. This new body will probably center their attention at the present time toward establishing standard grade for milk in the state. They recognize the urgent need for this and have already endorsed the proposal of standard grades of milk.

THOSE who have placed Japanese beetle traps about their lawns this summer should take heed to a warning from the New Jersey Department of Agriculture and complete the beetle attack by treating the lawn with lead arsenate. That little green beetle trap may cause an increased grub infestation in the lawn next spring unless precaution is taken against it. They explain it as follows:

"When, on one of its cruising flights, a Japanese beetle female passes one of the thousands of traps set out for it in various counties of the state, she is subject to two strong impulses, the desire to succumb to the attraction of the bait and the impulse to deposit eggs.

"Frequently the maternal impulse takes precedence and the burrows into the ground and

deposits three or four eggs. After an average incubation period of from 14 to 21 days, a tiny grub emerges from each egg. It feeds on roots and other material in the ground, where it remains over winter. In the spring it goes into a pupal or cocoon-like stage and emerges after from seven to 20 days as an adult Japanese beetle.

"Because of the two impulses which stir the female when she flies near a trap baited with geraniol, it is believed that as many beetles deposit their eggs as fall into the trap. As a result, unless precautions are taken, the grubs which are born beneath the sod of many front lawns may work havoc with the grass roots. Accordingly, it has been learned that traps preferably should be placed on lawns which have been treated with lead arsenate for controlling the grubs."

As throughout the Japanese beetle territory this summer there seems to be a great many more traps being used than in former years, this warning and suggestion to treat the lawns with arsenate of lead should be heeded.

AROOSTOOK county, Maine, and Prince Edward Island, Canada, are the goals of the Pennsylvania potato growers when they leave by special train for their annual tour, beginning August 18. On this trip, the ninth annual excursion taken by the Keystone potato producers, the growers will travel 2,700 miles over a period of five days.

They will travel northward through New York state to Montreal, then to Aroostook county, famous potato growing section of Maine, where they will spend Wednesday as the guests of the Maine Potato Growers' Association. The following day they will visit Prince Edward Island, Canada. The party will return to Quebec for sight-seeing Friday and then homeward the next day.

THE Maryland State Horticultural Society are holding their summer field meeting at New Windsor, Carroll county, on July 23. The fruit growers after visiting nearby orchards will have lunch on the campus of Blue Ridge College.

Governor Ritchie will be one of the speakers at the afternoon assemblage.

SEVENTY-FIVE farmers from Delaware, Maryland and Virginia left the Eastern Shore on Monday of last week to spend two days in New York City studying the great markets.

MARYLAND sheepmen will conduct their Fourth Annual Eastern Shore Ram Sale in Centerville on July 29. Each year this sale has attracted a large number of flock owners and has stimulated their interest in better breeding. Consigned to this year's sale are 23 Hampshire rams, ten Shropshire rams and two Southdown rams from some of Maryland's best pure-bred flocks.

All rams in the sale will be shown at eleven o'clock. This is the first time that a show has been held in connection with the sale, and it is hoped that added event will prove of educational value.

The sale starts at 1:00 p. m. and will be held on the court house lawn.

THE fiftieth anniversary of the founding of the New Jersey Agricultural Experiment Station will be celebrated at New Brunswick on October 5 and 9. At that time the institution will be host to farmers, representatives of agricultural organizations, state officials, agricultural scientists, and representatives of sister institutions in this and foreign countries. The exercises on October 5, which will be held on the campus of the Agricultural College and Experiment Station, will be marked by the unveiling of memorial tablets to Dr. George H. Cook and Dr. E. B. Voorhees, first and second directors of the Experiment Station respectively.

CORRECTION

I SHOULD like for you to correct an error which appeared in the New Jersey page of the last issue. The column telling about the World's Poultry Congress listed me as a breeder of Columbian Wyandottes. I breed Rhode Island Reds (Single Comb) only, and it was a trio of Rhode Island Reds that I sent to London. Louis D. Schaible.

[We are glad to make the correction and we wish Mr. Schaible the best of luck at London.]

In the Maritimes

By M. C. GILPIN

JUTTING out into the Atlantic east of Maine lie the Maritime provinces, New Brunswick, Nova Scotia and Prince Edward Island. This is a little country in itself and a fascinating one. The interior of the mainland is rough and wooded territory, the home of big game and said to be the place where fish stories come true. Along the coast and up the valleys is much rich cultivated land. Pennsylvanians know this region mostly as the source of seed potatoes and a competing region in apples for export to England.

The roaming hay-seed editors' first glimpse of the Maritimes was a morning ride across part of northern New Brunswick. Woodland, rivers full of floating pulp logs and stories of the size and valor of the salmon found in the streams aroused our interest in the province. These fish run three or four feet long and can be seen swimming in the pools like minnows. Much of the best salmon water is leased by rich sportsmen's clubs from this country. It is estimated that every salmon taken on hook and line costs a hundred dollars in club dues, tackle, transportation, etc. We did not take any. The fish is very game, breaking water like a rainbow trout, and it requires almost half a day to land one. The trick in doing so is to keep the line tight enough so that the captive when it leaves the water cannot cut the leader with a slap of its tail. Most salmon when landed have their tails lacerated by chopping at the leader with their teeth.

As we near the coast we enter the farm lands. Log fences framing long rectangular fields and farm buildings sided with cedar shingles give the country a distinctive appearance. At Chaleur, along the southern shore of the bay of Chaleur, we find a seed potato section, where we are told that the soil and climate discourage disease and insects while nourishing potatoes. This country is having quite a farm land boom due to the demand for certified seed potatoes, which it produces to perfection.

Farms average about a hundred acres. A few years ago one could be bought for three or four thousand dollars, but now few are for sale at any price.

The soil is a sandy loam. The season is late, but growth is very rapid. Heavy fertilization is followed, as much as a ton per acre. Spraying is of course practiced. Yields run around 350 to 400 bushels per acre. The chief kick the New Brunswick farmer has against the world is that the United States by a logic which is as puzzling to him as it is to some of our own farmers has seen fit to hamper the sale of those seed potatoes in this country by a tariff to protect our farmers when they are the buyers. The annual potato crop is around 12,000,000 bushels.

While New Brunswick has long been noted for its forest products, turning out some \$20,000,000 worth a year, farming is gaining in importance, and the province has much land suitable for farming which is as yet unoccupied. Mixed farming is favored, with the dairy cow a prominent figure in it. The climate and soil are suitable for the production of grass, roots and other forage crops. The provincial government and the Canadian National Railway are promoting colonization from England and Denmark. Canada chooses her immigrants with discretion. She is more interested in

quality than in quantity, reasoning that the right kind will prosper and increase, while the wrong kind would not be an asset to the Dominion.

Nova Scotia just missed being an island, being connected with New Brunswick by a narrow strip of land at its western extremity. Its jagged coast-line is a series of bays, coves, inlets and harbors which with the intervening capes and arms of land reaching out to sea make it a never-ending scenic delight and an ideal setting for the numerous summer resorts found there. In the rivers and bays trout and salmon abound, while in the backwoods are found moose, deer and bear.

The rambling editors reached Nova Scotia by boat, landing at Pictou after a breezy four-hour ride from Prince Edward Island. Pictou is an old and picturesque port. It was founded by the Scots and a bold kilted statue stares defiantly out over the wonderful harbor in memory of the event. At night we crossed the province by train and woke the next morning in Halifax. This is the capital of the province, an important naval center and



Pictou Lighthouse, Nova Scotia. Shipping is an important part of the business of the Maritime Provinces.

export point for nearly a third of the fish of the Dominion. Vast quantities of apples and other agriculture products also cross the sea from this port. It has one of the finest harbors in the world.

Our rusty history was burnished up a bit at many points on this trip. We dimly remembered that the French under de Monts settled at Port Royal (now called Annapolis Royal) in 1604, three years before the English landed at Jamestown and sixteen years before the Pilgrims saw Cape Cod. When we stood on the grass-grown ramparts of the old fortification at Port Anne, and went through the museum in the old officers' quarters on the parade ground, noting queer maps, ancient armour, primitive household and farm equipment and saw the key to the fort, which Boston has returned after holding it 200 years, we were transported back three centuries and could feel some relation with the hardy explorers who established civilization on this wilderness-covered continent. Our relationship seemed even closer when one of our party, James Speed, Kentucky editor



Farm homes in eastern Canada are unassuming but neat and attractive.

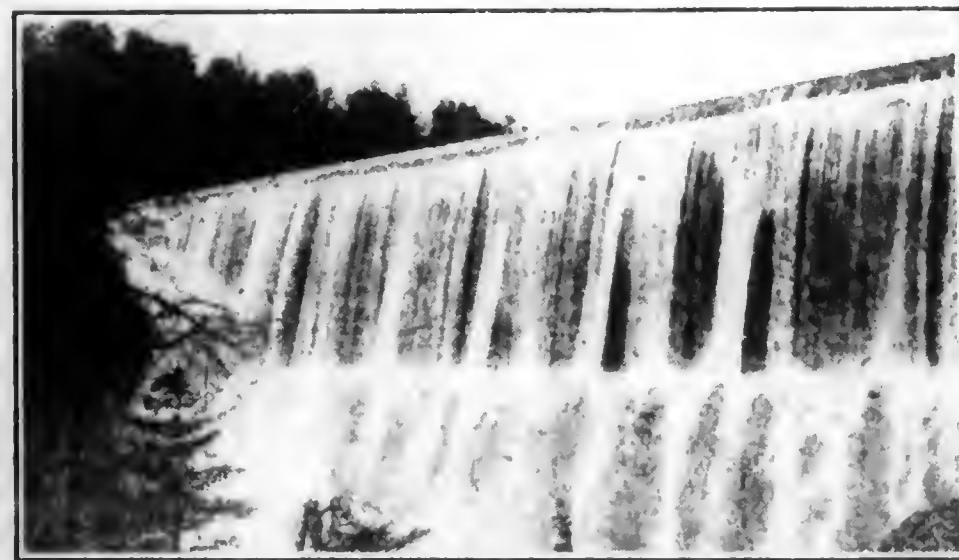
saw that the signature on one of the ancient maps was that of John Speed, his ancestor who lived in the days of Queen Elizabeth, compiled voluminous histories and geographies and raised eighteen children. We admit that we are a great people, but must doff our hats to some of the old-timers.

The first one hundred years of Port Royal's existence must have been a hectic time. It changed hands six times between the French and the English. The long struggle for possession began in 1613 when Captain Samuel Argall headed an expedition from Jamestown, Virginia, against the French settlement. The fort was taken and Acadia a few years later became "New Scotland," or Nova Scotia. It remained a source of contention and the scene of fighting until 1710 when it finally capitulated to the British under General Francis Nicholson. The general's first act was to change the name to Annapolis Royal in honor of Queen Anne, who at that time reigned in England.

Port Royal may be said to be the birthplace of agriculture, commerce and culture in the New World. The first wheat to be grown on this continent was produced and the first grain was here ground into flour, the waters of the nearby stream, now called Allen's Creek, turning the wheels of the first mill to be built in North America. The first ships built on the continent sailed from Port Royal, and the first play written and staged in America was here enacted in the open air as a welcoming gesture for incoming celebrities. It also saw the real drama of the Acadians' departure in the expulsion of 1755.

"This is the forest primeval. The murmuring pines and the hemlocks— Longfellow's introduction to his immortal poem "Evangeline" ran through our minds as we drew up to the station at Grand Pre and knew we were in the "land of Evangeline." In 1755 the Acadians were deported from this district, most of them to Louisiana. The wanderings of the girl Evangeline in life-long search for her lover when they were separated in the exile gave rise to the poem, which in turn has drawn the attention of generations toward the Annapolis Valley.

And we were not disappointed, for a memorial park marks the site of the town from whence the unfortunate Acadians were sent. A statue of Evangeline in the foreground centers our interest. On viewing it from one position we see a young girl. As we walk slowly around clockwise we see the expression of the face change as with increasing years until the last glimpse of the profile is that of an old. (Continued on page 14.)



Water power is abundant in Canada. This 160-foot dam in New Brunswick provides electric light and power for a wide area.



The Evangeline memorial park commemorates the exile of the Acadians in 1755.

The Skokums of the Allegash

By Holman F. Day

Copyright, 1907, by Perry Mason Company, Boston, Mass.

WHAT the ceremony of the "coming aboard of Neptune" at the equator is to sailors who enjoy rude farce, the "inauguration of the mayor of Toban Jaws" is to the rough jesters of the head drive of the Allegash.

Since the drive had passed Tulandic stream, Shain Searway was the only man in the big crew who did not know the jocose secret. To be sure for many days he had noticed an inclination among the drivers to get away from him and talk in low tones. Men grinned queerly when they looked at him. Once or twice, while the crew had been sitting round the fires of an evening, some joker had inquired of the young man whether he had ever held office.

As he was still one year on the callow side of his majority, this questioning astonished him a little, but not much. A youth who is making his first season with the roaring, rollicking gang that starts at headwaters with the melting snows and the cracking ice, and wallows in the chilling eddies of the brimming flood, hurrying on the balky logs grows in time to be astonished less and less by anything.

Regularly for several days now the cook had been inquiring with apparent solicitude whether the beans of that day had suited his taste.

When he replied in the affirmative, the cook with solemnity advised him to dig up the beanhole of the night before and take it along, so as to be sure of one. Searway laughed at a jest that appeared to be getting well worn, but he did not seek for hidden meanings.

He went on with the roaring crew without worrying his head by thinking of anything in particular. Every day was a fresh delight. All the country was new to him. The great waterway seemed to be taking him into a land of mystery. He knew that years before, when his people had spelled their name "Sirois," they had been among the fleeing Acadians who left Grand Pre and rafted their poor possessions up the St. John. And this river that splashed him now would take him down through the land of the new Acadia, from which his ancestors had emigrated to the clattering mill town—the town from which he had escaped now into the wild, free life of the north country.

The first nights were strange and troublesome. When he shivered by the fire, trying to dry his soggy clothing, his calked boots propped open towards the blaze, the others snored peacefully, lying down as they had come dripping from the river. But after a time, even in the chill April, with its breezes straight from the snowdrifts, he had accustomed himself to sleep in his wet garments, the water gurgling in his boots when he worked his toes. He had learned the woods adage, that a man never catches cold if he keeps on his clothes and does not change his wet stockings.

Thus, in a short time, Shain Searway grew to like the long days in the bateaux, the ever opening vistas of the river, the wadings in the eddies, the "yo-heave-oh" log rolling, the piping hot meals on shore, the four of them between sunrise and turning-in time, and in the evening the snapping fires of dry-kye, the stories and the choruses.

One evening early in May they waded ashore at a granite gateway that pinched the river into a sluice, down which the frothing water jarred with a dull clamor.

The cook preceding the wading crew by many hours had his shelter tent pitched at the head of the sluice and his fire was cheerily lighting up the big pines that drooped over the camping site.

"It's Toban Jaws," said "Able" Angus to Searway, as the two clambered up the bank toward the fire. "They were chewing that strip of water before Noah sailed across here in the ark, if he ever came this far. Old place, you see. It's quite a compliment to be elected mayor of such a place, eh?"

Shain agreed without noting the arch cock of Angus's eye.

"But there doesn't seem to be any place to it," he objected, when he was well up the bank. "Only trees and rocks—or is there some town over behind the trees?"

"No, it's all here," replied the tall driver; "and what more do you want? Here's the river just a-roarin' for mill-wheels for it to turn, and the land aching for houses to hold in its arms. Just see it poking out the foundation-stones in that nice, coaxing way, and all ready for houses to sit right down on! Oh, it's a fine place, Toban Jaws is, and being mayor of it is a fine job!" And Angus tossed away his cant-dog with a chuckle, and took his heaping tin plate from the cookee.

It was Andrew Tidd, "boss" of the crew, who rose and broke the unusual silence that followed supper.

"Fellow citizens," he said, "I don't have to tell you that you are in that grand metropolis, Toban Jaws. All I can say is, that of all the cities we've passed since we left headwaters this spring, this metropolis offers the best opportunities for newcomers. In fact, there's all the room here that any man can ask for. I'm proud to say that I've kept my voting residence in Toban Jaws. And I

rock, the boss's extended arm pushed away his hand.

"It wouldn't be polite," he said.

"It's only a little clean stone," apologized Shain, "and the rest of the men were—"

"Oh, but you see it would be voting for yourself, and the rest ain't doing that."

"Voting for myself!" The young man's voice was so full of amazement that the men who were crowding round shouted their mirth and smacked each other on the back with broad palms.

"Why, every vote in this hat," roared the boss, flinging handful after handful into the air, "is for the Honorable Mister Shain Searway for mayor of Toban Jaws, as all the voters can see for themselves, and I declare him elected and call for three cheers!"

With every face convulsed with merriment, every mouth wide with its hoarse shout, they crowded round the astounded youth, yelling in his ears, jostling him, reaching for his hands, pump-handing him without mercy. Then followed an insistent chorus, calling for a speech, and half a dozen men, after hustling him about, tossed him to the top of the big boulder, where he stood surveying them stupidly and stammering questions.

"You want to state what reforms you mean to bring about," suggested the boss, his voice swelling above the clamor.

"I'd have it a law that you couldn't elect the biggest greenhorn in the crew for mayor of Toban Jaws!" cried the young man; and his words were greeted with the wildest burst of applause that had yet shaken the pines overhead.

"It isn't every mayor that realizes just why his admiring fellow citizens have elected him!" cried the boss. "You've guessed right the first time, youngster. Therefore, let all the aforesaid admiring fellow citizens form on for the mayor's grand parade."

A dozen of the older river-men, who had participated in many of these celebrations, seized upon cant-dogs, that they shouldered like so many staves. The canvas of the cook's little shelter was stripped off the poles, a score of men gripped its edges, and into its baggy depths the new executive was dumped, in spite of his struggles.

Other men grabbed brands from the camp-fire, and marshalled the parade as torch-bearers. And up the winding wood road, that served as the carry-path round the Jaws, went the clamorous troop, each man shouting boisterous mirth and entering into the spirit of the farce with a zest truly juvenile.

THE men who bore Searway in the canvas tossed him high in the air every few minutes, caught him dexterously, and went on. The makeshift torches streamed sparks up into the gloomy shades of the spruces and hemlocks. There were queer little scurrings in the coverts beside the road, as the rabbits hopped and the porcupine stumbled to hiding-places.

Once his bearers tossed the young man so high that, clutching madly at the branches of the low spruce tree into which he was dashed, he caught and clung fast. This sudden disappearance seemed to strike the crowd as the funniest part of the whole affair, and after laughing a while, they "doused" the torches, folded up the canvas, and ran tumultuously back to camp, leaving their new mayor roosting on a lofty limb.

When he scrambled down in the darkness, and had picked his way back, the men were apparently snoring peacefully; and if occasionally a snore ended in a snicker, no one commented on the fact, not even the victim of the evening's horse-play.

Shain, sore, confused and indignant, felt satisfied to have the joke stop there, knowing what it means to poke a sleeping lion—or even a lion that is making believe to sleep.

As usual, the cook's shrill "Whoo-ee-ee!" called them out at dawn the next morning, and twenty minutes later the men were filing down to the water. But when Shain started with his cant-dog, the boss laid a restraining hand on his arm.

"What do you suppose you have been elected mayor of this place for?" he demanded, a glimmer of the fun of the previous evening still in his eyes, although his regular morning demeanor was brutally gruff.

"I'll tell you," he proceeded. "We leave one man here every season to watch the big ledge there. It's the only one on the river where the current piles sticks crosswise. If a log hangs up, it is sure to hold up others and make a jam. And a jam at Toban is a tough proposition. As long as they're running free you haven't anything to do except preside over your city government meetings. You must appoint yourself city marshal, and then see that there is no looting on the street corners," he said, grimly, with a jerk of his thumb at the big ledge in mid-stream.

"We always pick the runt for the job," added the boss, "and we make a little fun out of it, that's all. You're the lightweight this year. There are your stores that the cook left piled up there on the bank. There's a strip of canvas for your shelter, and here's hearty hope for an easy job and a pleasant summer."

(To be continued.)

The Cheerful Plowman



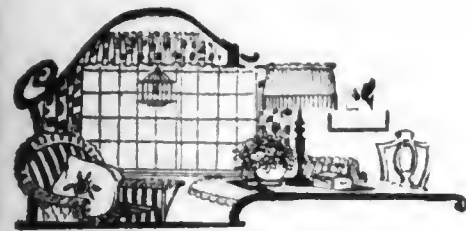
A LITTLE EXTRA

NOT pint for pint and quart for quart, I'm far too good a friend and sport; I give an extra bit. My neighbor may not under law have rights to ninety pounds of straw, no, not a bit of it, but nonetheless I weigh him out some ninety-two, or thereabout, a gospel measure weight; I will not be bound down by, I say, in any dried and fettered way, and have not been to date.

In business and in marts of trade I realize how coin is made, there must be caution colored; a grocer cannot give to me an extra ounce of tea, 'twould break him up, I swear; the butcher cannot give away an extra pound nine times a day and pay his overhead, he cannot say, "Oh, that's all right, take home an extra ham tonight, and beef-steak thick and red!"

The plumber cannot say, "Oh yes, here's sixteen extra feet, I guess, of corrugated pipe, but that's all right with me, old top, take that along and do not stop." His business sense is ripe. The baker dare not, must not, feel that thirteen biscuits, fat and real, make just one dozen flat, or he will soon be on the street without his stockings on his feet, he'll soon be busted. Scat!

But, business, strict, and hard, and cold, and it was known in days of old, as it is known today, need not one moment interfere when I am weighing parsnips here for neighbor Pat O'Day! No, Pat shall have an extra pound, three extra ounces big and round, two extra pints of milk, and when I'm paying back some thread I'll give him, sure as Ned is Ned, six extra yards of silk.



The Farm Home



Getting Rid of Ants

THERE are a number of common species of ants which get into houses from time to time and cause annoyance by appearing on foods, especially sugar, cakes, candies and other sweets, and cooked foods of animal origin. An ant having once gained access to foods of these sorts reports the discovery to the colony, and in an incredibly short time the premises may be swarming with these unwelcome visitors.

According to the Bureau of Entomology of the U. S. Department of Agriculture, both house and garden ants at times become a pest in the pantry and kitchen. The species that live entirely within doors nest in woodwork, masonry or articles of furniture. They are often very difficult to eradicate because of their inaccessibility. If the nest can be located by following the trail of the workers back to the point of their disappearance, the inmates of the nest may sometimes be reached and destroyed by injecting a little carbon disulphide, kerosene, or gasoline into the opening, by means of an oil can or small syringe. In the use of these substances, precautions should be taken to see that no fire is present, as they are all inflammable.

The removal of attracting substances from their reach should be the first step. Keep food supplies which are likely to attract ants in tight containers or in the refrigerator, and sweep up promptly any crumbs of cake or bread scattered by children. Find and destroy the nest as soon as possible. It ought not to be necessary to take up the flooring to get at it, for poison baits can be used to kill the queens and the brood.

Kerosene for Lawns

The young woman in the picture is treating the trail of the ants she has observed with kerosene, putting it on with a paint brush.

Almost any of the common garden or lawn ants which build their little crater nests in the soil about houses may become temporarily house pests in their search for food substances. When this occurs the nuisance can often be eliminated by tracing them back to their outdoor colony and destroying the nest. One way of doing this is by pouring boiling water from a teakettle over the nest. An oil can or small syringe could be used



Place poison bait for ants out of reach of children.

for the purpose. Care should be taken that no fires are present if kerosene, gasoline or carbon disulphide is used in treating nests.

When ants are found swarming up trees they may be caught in large numbers by putting up poisoned bait, consisting of a sugar sirup to which sodium arsenite, benzoate of soda and tartaric acid are added. Precautions should be taken to safeguard human beings and domestic animals when poisoned sirups are being prepared or kept on hand. Bait of this kind is put into a paraffined paper bag with one side folded down to admit the ants. It is nailed on the tree as shown, out of reach of little children.

Small lawns may be sprayed with kerosene emulsion or a very strong soap solution, to destroy ants. Dissolve half a pound of any common laundry soap in one gallon of water for use in this way.



Painting an ant trail with kerosene.

Beware of Poison Ivy

POISON ivy held no terrors for the people of grandmother's day. Profiting by the example of Indian neighbors, it is said they inoculated themselves by chewing the leaves. In modern times the same results are obtained by the more scientific method of injecting an extract of the plant into the bodies of susceptible persons.

But this measure is seldom necessary for the casual hiker or visitor to the country. The proverbial ounce of precaution plus a cake of soap are usually sufficient protection against the irritating rash that is likely to result from contact with poison ivy.

Most seasoned hikers find it easy to recognize the vine or shrub by its long green stems, by the notched leaves growing in clusters of three, and by the small greenish flowers which later ripen into greenish white, waxy berries. Poisoning, however, is not always the result of direct contact. Cases have been traced to a towel used after it had been infected by contact with a shrub, and to sap from the roots of a plant which had been cut to the ground. The sap might have oozed readily onto a cooking utensil, a dropped handkerchief, or some article of apparel.

For the benefit of persons who fear they may have come in contact with poison ivy, the following preventive measures are recommended by Dr. Herman Goodman, well known skin specialist:

"Stand under a shower of warm water and wash every part of the body with a soap that lathers freely. Wash the hair to get rid of any sap which may have reached it. A tub bath will prove satisfactory if you fill the tub with water, then remove the stopper and let the water continue to run in and out at the same time so that there is a constant fresh supply. If you lack both tub and shower, a bucket of water will do.

"After the bath use rubbing alcohol to dissolve any remaining poison sap, then rinse away the alcohol with water. Remove all the clothing you wore while exposed to the poison ivy and wash or air each article."

Timely Tips

WEAN your baby from the bottle tactfully. Begin early enough that it does not seem unusual to him, letting him have a little from the cup as a special treat. Do this regularly every day, showing no particular interest whether he likes it or not. Soon he will come as a matter of course to drink from the cup, and keep his love for milk.

When the kiddies or grown-ups have colds in the head, let them use more pillows or put a pillow under the mattress, so that the head may be raised while sleeping. This relieves the discomfort, and helps keep the nose clear, when practiced in connection with the regular treatment.

Remember that children usually love fruit juices, and that the fruit juices may be weakened with water, thus increasing the supply of water which the child drinks. Apple juice and grape juice, pineapple juice and the juice from any canned fruit are all good for children, and make a welcome addition to the regular orange and tomato juice. Vegetable water and juices are most valuable also.

M. C. B.

Sauces Old and New

By BETTY BARCLAY

THERE is something piquant, pungent, call it what you will, about baked ham, cold meat, sea food and dozens of other dishes prepared by the expert, that is seldom found when the same dish is served in the home.

Trace that elusive something to its source and you will usually find that the difference lies in the sauce. The housewife, far too often, fails to serve a sauce, or if she serves one, she fails to inject into it the piquancy that gives the chef his reputation.

This is not as it should be. Few sauces are difficult to prepare. A little time and patience, a little study of sauce constituents, a careful reading of directions so that a recipe may be followed accurately—and the sauce may be served at home with all the flavor and attractiveness of its namesake, born in the hotel or club kitchen.

Mustard, pepper, cayenne, salt, sugar, cinnamon, nutmeg, curry, spice, caviar, pot herbs, onion, hedge garlic or plain garlic, pickles, lemon juice, allspice, horse-radish, capsicum, chutney, tabasco, cubeb and pimento—all are sauce makers. It is doubtful, however, if the average housewife makes use of one-half these constituents in the various sauces she prepares during the year.

A suitable sauce will always give a greater zest to many a familiar dish. Try the recipes below and see how true this statement is and how easily you can acquire a piquancy that you may have been endeavoring to secure for years:

Berber Sauce

Heat one pint sweet cream and one tablespoon cornstarch in double boiler. Mix together four tablespoons dry mustard and one-half cup sugar. Add to the liquid and boil for two minutes. Add beaten yolks of two eggs and boil two minutes. Add very slowly one cup cider vinegar and a half teaspoon salt. Boil another two minutes. This sauce is excellent for baked ham.

Seafood Sauce Supreme

Mix together one cup horseradish, one-fourth teaspoon dry mustard, two tablespoons sugar, and juice of one-half lemon. Heat in double boiler. Add slowly one-half cup sweet cream and cook until thick. Then add one tablespoon butter. This may be used with any seafood.

Sauce Tartare

This sauce adds greatly to the appetite appeal of fried oysters, scallops, smelts and many other varieties of sea food. Mix together one-half teaspoon mustard, one-half teaspoon salt, few grains cayenne and one teaspoon powdered sugar. Add yolks of two eggs. Stir until thoroughly blended setting bowl in pan of ice water. Add drop by drop at first, one-half cup olive oil, stirring with wooden spoon or wire whisk. Dilute very gradually with one and a half tablespoons vinegar as the mixture thickens, at the same time adding the oil more rapidly.

Keep in the refrigerator until just before serving. Then add one tablespoon tarragon vinegar, one-half shallot chopped fine, and one-half tablespoon each of finely chopped capers, pickles, olives and parsley.

Custards for Convalescents

TO be in charge of one seriously ill for a short time was a new experience. During the period of recovery I learned several points about meals. As my patient would eat no eggs "plain" neither raw nor cooked, I used my imagination on custards. Like most home nurses, I had to economize on time. So I cooked my custards on alternate days, providing for family and patient the one day and for patient alone the following day. Ovenware cups worked well on the sickroom tray.

Sometimes the custard was plain baked, with no ornament but nutmeg, sometimes the whites of the eggs were kept for meringue. I tried using a layer of jam on the custard under the meringue and also topping the meringue with a bit of bright jelly.

The thin, stirred custard seemed palatable when eaten with strawberries or pineapple. Lemon custard made another change, and so did ice cream (from town). If I had had some convenient means of refrigeration, I might have tried more variations along that line.

Vida M. Bates

WON'T
BOIL
SPONGY!

GOOD HOUSEKEEPING FRUIT JAR RINGS

Cold pack canning requires Jar Rings that stand up under boiling. Try a Good Housekeeping Ring: Boil it—hard—once, two or three hours. Not one spongy spot. Twist it, stretch it—still rugged and pliant.

No wonder housewives have such "luck" canning with these Rings—there isn't a chance of going wrong. The strong grip of the extra-thick Good Housekeeping Ring protects all kinds of fruits, relishes and vegetables for several years, if necessary.

Good Housekeeping Jar Rings are strong, springy rubber, preventing "spurts" from ruining your work at the last minute. For hot or cold pack. Won't harden, crack or curl.

APPROVED BY GOOD
HOUSEKEEPING INSTITUTE

GOOD HOUSEKEEPING FRUIT JAR RINGS

At all good grocery and hardware stores
HAMILTON RUBBER MFG. CO.
Trenton, N. J.

10% CUT
FROM CATALOGUE PRICES
FOR SHORT TIME ONLY
You can deduct 10% from any price listed in our catalogue.

Our "Royal" Modern Bathroom
Includes Bathing, Porcelain Toilet and Wash Basin, Complete with Fixtures and Five-Door Linoleum Mat.
Was \$52.50, Now \$47.25

WE PAY The Freight on Everything
Write for FREE Catalog 90
J. M. SEIDENBERG CO., Inc.
251 West 34th St., New York

ADVERTISEMENTS

short cuts to finding out the truths about everything you want to buy. The names of advertisements are names of reputation. The labels in advertisements are symbols of station. It pays to read the advertisements, for then you know what is good. The products they tell you about are best thought, tested constantly and fact that they're still being advertised is alone proof of their worth.



Smart Frocks for the Family

No. 6881.—Ladies' dress. Cut in five sizes: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 3 1/2 yards of 39-inch material. Belt of contrasting material requires 1/4 yard cut crosswise. To finish with bias binding requires 3 1/2 yards 1 1/2 inches wide. Price 15c or two for 25c.

No. 6888.—Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires 3 yards of 35-inch material. For contrasting material 1/2 yard cut crosswise is required. Price 15c or two for 25c.

No. 6899.—Girls' dress. Cut in four sizes: 4, 6, 8, and 10 years. A 10-year size requires 2 1/2 yards of 35-inch material. The facing and belt of contrasting material requires 1/2 yard 35 inches wide cut crosswise. Price 15c or two for 25c.

No. 6756.—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. A 10-year size requires 2 1/2 yards of 35-inch material. To trim with lace will require 2 1/2 yards. For bow and sash, of ribbon or material 3/4 yards 2 1/2 inches wide are required. Price 15c or two for 25c.

No. 6479.—Boys' suit. Cut in five sizes: 2, 3, 4, 5 and 6 years. A 3-year size as pictured in the large view will require 7/8 yard for the blouse, and 1 1/4 yards of contrasting material for collar, cuffs and trousers of 35-inch material. If made with long sleeves the blouse requires 1 yard. Price 15c or two for 25c.

No. 6200.—Ladies' apron. Cut in four sizes: Small, 31-36; medium, 38-44; large, 42-48; extra large, 46-54 inches bust measure. To make the apron for a medium size will require 2 1/2 yards of 36-inch material. To trim with bias binding as illustrated requires 1 1/2 yards. Price 15c or two for 25c.

No. 6893.—Ladies' chemise. Cut in four sizes: Small, 31-36; medium, 38-44; large, 42-48; extra large, 46-54 inches bust measure. A medium size requires 2 yards of 35-inch material. To trim with lace as illustrated requires 1 1/2 yards. Price 15c or two for 25c.

HOW TO ORDER

Write plainly, giving pattern number and size. Address Pattern Department, Pennsylvania Farmer, 7901 Penn. Ave., Pittsburgh, Pa.

eat crisp POST TOASTIES

the
Wake-up Food

it's full of rich
energy—it's easy
to digest—
LITTLE FOLKS
love it—



BIG FOLKS, too—
because it's so good—
because it's the
Wake-up Food



© 1930, G. F. Coy.

THE YOUNG PEOPLE

Pokey Huntus

THIS little skit may be used for a pantomime or a reading, and may be worked in very cleverly with a program for Grange or home entertainment.

Characters

Curtain	Squirrels
Scene	Situation
North wind	Captain John Smith
Fine tree	Pokey Huntus
Elm	Danger
Plum	Chief Powder Can
Maple	Holy Father
Sun	Birds
Brook	

Cardboard signs (8x12 in.), with long strings attached for hanging around the neck, must be prepared in advance for the following:

Properties: A broom, bucket, nuts, flashlight or matches, ladder, hatchet, rope and a block or box. A large heart cut from red cardboard; a pair of cut-out goggles; a "Warrant" and a "Manifesto"; two scrolls which may be rolled up, one containing the words "Not on your life," and the other "If he goes, I go."

Action: The following story is read slowly and distinctly by a reader. The characters holding the cardboard signs in plain sight, act the words out literally, with much exaggeration and enthusiasm. Each capitalized word represents the character in action at that time, and the word in bold type indicates the action.

Prologue:—
Young folks, have you heard the story,
Heard the great and thrilling story
Of the Princess of Virginia
Of the noble Pokey Huntus—
How she saved the captive white man?

Listen now and I'll unfold it.
John Smith was the captive white man;
Pokey Huntus, Indian Maiden,
And Virginia owned as chieftain
Powder Can, who savage people
Ruled with might and ruled with power.

Softly now the CURTAIN rises.
See the SCENE laid in the forest.
Where for many moons I'm thinking
That fair scene when keep on lying
Through the forest comes the NORTH
WIND.
Shakes the trees and makes them wiggle
Wiggles now the stately PINE TREES.
Wiggles too ELM, PLUM and MAPLE.

Lo, where in the highest heaven
Mounts the SUN (climbs a ladder)
and casts its bright ray (lights the light)
Hear the BROOK, so sweetly gurgling,
Bubbling, prattling through the forest.
See the SQUIRRELS gently sporting
Gathering nuts to safely store them.
Comprehend the SITUATION
Calm, serene, and full of beauty.
But the restless WIND comes sweeping
Sweeping onward o'er the fair SCENE.

Now the hero, CAPTAIN JOHN SMITH
Is a-stalking the through the forest
Now our darling, POKEY HUNTUS,
Smirking, humming, trotting trips in.
Watch our darling mincing onward,
Sweeping obstacles before her.
SMITH, he sees our blessed darling,
Fastens sad his EYES upon her. (His eyes
on Pokey.)

DANGER all about is hovering,
Lurking in obscure places.
Then CHIEF POWDER CAN, the noble,
In his might, he comes a-stalking
Calmly steps upon the FAIR SCENE
While he views the SITUATION.
SMITH he stands in all his manhood,
Meets the red man's gaze of anger,
Watches while he shows his "Warrant,"
("Not on your life")
See the block of execution
That the noble SMITH is led to.

Hold your tears! Stop all that weeping!
Fate! It isn't going to hurt him.
POKEY wails and groans and shudders
Holds her and her "Manifesto" ("If he
goes, I go")
Silence reigns. Then through the forest
Breaks the mighty NORTH WIND
Shakes each tree and makes it totter.

POWDER CAN deep thoughts is thinking
"Shall I scold him—give him POKEY?"
Better thoughts at last prevailing
He relents and kicks the bucket.
Now the SITUATION changes.
JOHN SMITH gives his heart to POKEY
Bege her be his darling wife.
Enter quick the HOLY FATHER,
Ties the knot (fastens them together with
rope).

While from the forest
All the BIRDS sing happy carols (Whistle
the wedding march).

Now you've heard the noble story

Note: This pantomime will well repay costuming and careful preparation. However, it has been presented many times as an impromptu entertainment with one rehearsal of 20 minutes. All properties must be ready and in place. The reader should have a clear, strong voice, and read slowly and dramatically, waiting until each character has completed his action before reading the next.

This pantomime was taken from the "Handy," a booklet of entertainment published by the Church Recreation Society, Chicago, Illinois.

BERRY GUESSING CONTEST

1. What berry is red when it's green?
2. What berry is used for making ladies' dresses?
3. What berry is found on the grass?
4. What berry is a dunce?
5. What berry is irritating?
6. What berry is used for bedding cattle?
7. What berry is used for celebrating a great festival?
8. What berry should be respected for its age?
9. What berry is melancholy?
10. What berry is named for a month?
11. What berry is used in sewing?
12. What berry is named for a bird?

Watch for the answers next week.

WHY DON'T YOU WRITE?

HOW would you like to tell all the young folks of the Pennsylvania Farmer family about your vacation trips this summer? I'm sure you must have had some good times this year and we all want to hear about them. There will be ten prizes for the best letters on "How I Spent My Vacation." Write plainly, using ink.

Then we are offering prizes for the best drawing on any subject. The Little Folks' Corner is greatly in need of some new material and you know we depend on "our artists" to supply our needs. Do send your best drawings immediately.

It has been suggested that we publish a short story, bring it to a very exciting point and allow the readers to send in their idea of how the story should end. There will be prizes for all stories and endings published.

Now let's load the mailman down with letters to Young People's Editor, Pennsylvania Farmer, 7301 Penn. Avenue, Pittsburgh, before August 15th.

Little Folks

The Tale of Tommy Twitchet

By RUTH PLUMLY THOMPSON

TIMMY TWITCHET was a little gray mouse-gentleman with curly whiskers and charming manners. He was a self-made mouse, moreover, and had, by his own efforts, risen from the woodshed to the attic.

Timmy's early years had been spent as apprentice to a cross old cobbler-mouse whose bootshop was in a corner of the shed in a large city dwelling. Early and late the little mouse was kept blacking boots and running errands.

But Timmy kept his eyes open and before long had got a position as headwaiter in a modest mouse hotel kept by an old maid mouse in the kitchen cupboard. And so successful was he in gathering crumbs and other attractive fare from the dining-room table that he was asked to take entire charge of the Young Business Mouses' Lunch Club, which had quarters in an exclusive corner of the sideboard.

From then on Timmy's fortune improved. He had a wonderful faculty for getting what he wanted without being molested by the giant two-legs who owned the house.

Tommy Won't Settle Down

He taught in the public mouse-school in the library bookcase; then progressed rapidly through every room in the mansion, each time bettering his position and acquiring a little of the polish which later made him so delightful and so popular. In his early prime Timmy reached the top floor and here, in the children's nursery, ran a flourishing banking business.

The dolls urged him to settle down—to build a house (there were plenty of blocks and supplies to be picked up cheap), but Timmy shook his head. When he settled down, he decided solemnly, it would be among his own people and in a quiet neighborhood.

So one day, after adding up his cash book, Timmy found he had enough to retire comfortably and, bidding good-by to the toys, he turned his steps toward the attic. It is to the attic that wealthy mice who have made their fortunes retire to live in ease and comfort far from the noise and persecutions of people, and it was in the attic that Timmy found his future home.

Wants His Name on the Door

It was in the suburbs of the little flourishing attic city, and how the mice had overlooked it Timmy could not imagine. With his paws clasped in ecstasy Timmy stood before the handsome old homestead—then, dashing up the steps, claimed it for his own.

No wonder Timmy was so delighted. It was an abandoned doll house with a colonial front door, windows that opened, shades, furniture, carpets and a real bath tub.

The excited little mouse-gentleman hurried from floor to floor, snatched up all the shades, looked under the beds, bounced on the old-fashioned sofa to test the springs and finally, with a chuckle of pure content, settled down in a big (for a mouse) arm chair to brood over his good fortune. Then winding the clock which never ran, he hurried down to the attic hardware store and ordered a brass name-plate for his door.

Timmy Twitchet, Esquire.

Off to Slumberland
And mind you letter it plainly, he ordered, twirling his cane recklessly and strode out, leaving the shopkeeper breathless with admiration. Timmy had style, there was no denying!

On the doll house steps Timmy paused again to admire his mansion. He thought with scorn of the old hole in the shed that used to harbor him, and of his struggles to rise in the world.

"This is living," said Timmy proudly. "A little paint, a thorough cleaning and a few personal touches will make this the finest establishment in the attic!"

No callers came that evening, so Timmy retired early and, dreaming of sun parlors, green portieres, red lamp shades and a life-size portrait of himself over the library mantel, the little self-made mouse dropped off happily to sleep in the tiny four-post doll bed.

Editor's Note: From time to time you Little Folks are going to have the joy of hearing more about Tommy and his travels. Be sure to watch this corner.

PRIZE WINNERS

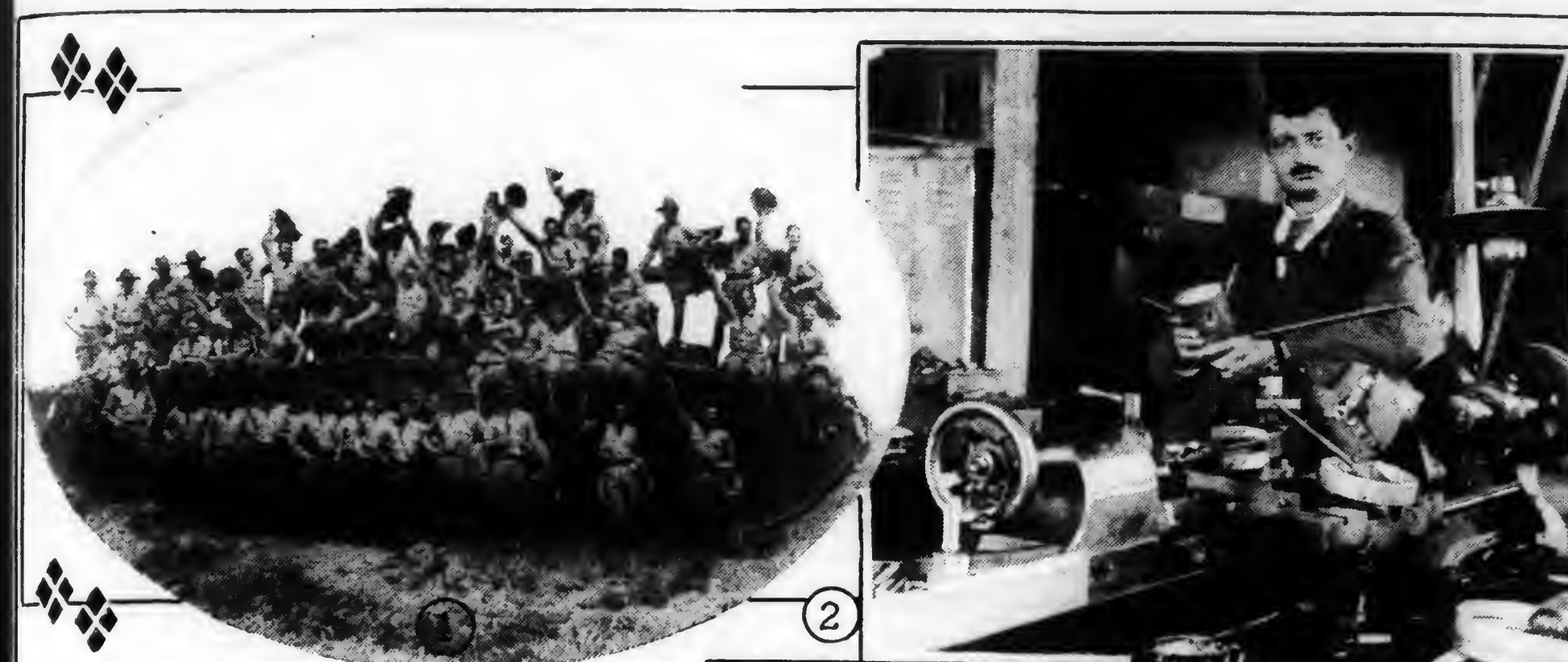
Coloring Boxes

Elizabeth Dyminger, Ellen Hope Morgan, Joseph Kuller, Esther Bollinger, Louise Crandall, Kathryn M. Camar, Edith Mitchell, Rena Heintzelmann, Edna J. Hauptman, Margaret M. May, Alice Miller

GOOD MORNING

Say good-morning with a smile
To the neighbor you chance to meet,
And "good-morning" with a smile
Your neighbor will repeat.
Just a little sunshine
Just a little cheer
Will help to keep you smiling
All through the year.
Chewford county, Pa. Lillian Page

PASSING EVENTS IN PICTURES



1. Members of the First Class of the West Point Military Academy visit the Tank Corps school at Fort George G. Meade, near Washington, and get first hand knowledge of the great rolling fortresses.

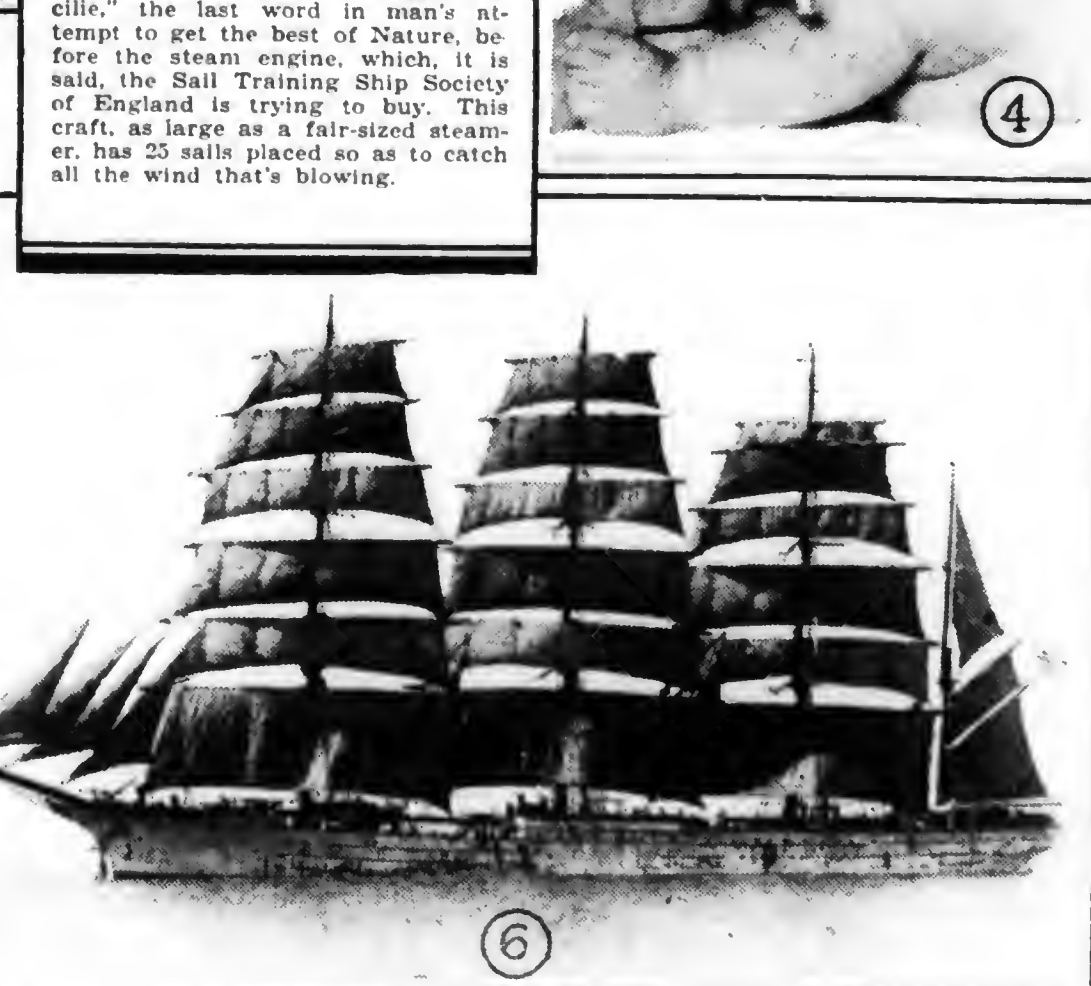
2. Prague, Czechoslovakia.—The famous German inventor, Professor Oberth, who will aid Professor Ludwig Ocenasek prepare for the shooting of the first "ether rocket" into space, in his construction laboratory.

3. An old British custom.—Druids gather at Stonehenge for ancient rites. Photo shows a general view of the Druids' midday service at Stonehenge, England, on Sunday, amid the ancient Druid temple ruins.

4. A most charming study of babyhood—little Peter Mackay, infant son of an American mining engineer well known throughout the Balkan States. The youngster was caught in this pose by the King of Bulgaria who, wearing a grotesque mask, astonished the child.

5. Ocean City, N. J.—Photo shows the new national marbles champion, Jimmy Lee, of Columbus, Ohio, with the crown he won at the tourney here.

6. A pictorial shot of the Finnish four-masted barque "Herzogin Cecilia," the last word in man's attempt to get the best of Nature, before the steam engine, which, it is said, the Sail Training Ship Society of England is trying to buy. This craft, as large as a fair-sized steamer, has 25 sails placed so as to catch all the wind that's blowing.



Farmer's Business Letter

GRAIN markets are sluggish. No where is there any enthusiasm with respect to its future, so far as prices are concerned. Supplies on hand and in sight are large, and everybody seems to feel that until the demand shows more signs of catching up with the supply it is hopeless to count on any material improvement in the price level.

The acreage reduction campaign through the western states, featuring Mr. Legge and Mr. Hyde, resulted in more publicity for the Farm Board and its program than it has yet had. At St. Paul, after he had been down through Nebraska, Kansas and Oklahoma, Mr. Legge "announced" that the success of the Board's program was assured. There was some disagreement on this point, however, among some of the men of long experience in the southwest part of the country. The opinion is heard that there may actually be an increase in acreage, because there is no other crop they can turn to, and because of a belief that in general there should be some decrease in acreage, due to low prices and to the board's appeal, it might prove to be a good time to have a big crop.

Under the pressure of inquiry Mr. Legge stated that the Board would buy no more wheat at this time, unless to replace whatever old wheat is disposed of from time to time.

Another significant statement came from Mr. Hyde. He expressed the opinion that the Board is forbidden by Congress "to do anything that might lead to increased production."

There was little change in grain prices this week. Wheat, corn and oats all showed small net gains, but not enough to talk about or to have any significance.

Lambs Off

Down again in the lamb market. The decline amounted to about a dollar this week, leaving tops at the close at \$10.25 to \$10.50. Sheep were mostly a quarter lower. A generous run was too much for the market. Chicago had 72,600 sheep and lambs, of course mostly lambs. This was an increase of near 19,000 over the previous week, and \$900 more than the same week a year ago. And it is a pretty good guess that receipts will continue large for some time.

Hogs Lose a Little

The spread in the hog market continues to widen, as is usual at this time of the year. There is a dollar difference now between the average and the top. The market this week was not too good, receipts being quite liberal. Average price was \$8.70, 30 cents under last week and \$2.75 under the same week last year. Eleven markets had 431,000 hogs this week, against 498,000 last week and the same a year ago. Due to the large supply of sows average weight continues to run high, 253 lbs., against an average of 248 for the past five years.

In the futures market prices were steady to a shade lower. Light hogs for September delivery sold at \$9.50, 9.70 for medium weights brought \$9.45 for September and \$8.50 for December; heavies sold at \$9.25 to \$9.65 for July delivery.

Big Loss on Steers

It was a bad week in the cattle market. Prices for the week showed declines of \$1.50, and in cases even more. It is tough going for those who have cattle on feed, and reports indicate that there are still plenty of cattle tied to corn. Steer average price fell to \$8.70, 45 cents under last week and \$6.15 under the same week last year. Butcher stock of some kinds declined even more than steers. Receipts at 53,000 were liberal compared to some recent weeks and of course too large for the limited demand.

Chicago, July 19, 1930 Watson

Produce Market Review

THE Philadelphia egg market showed but little change during the past week. The quality of the eggs received was poorer and prices were irregular for this reason. Graded nearby whites sold within a range of 26 to 30c a dozen, with the top quotation being realized only on fancy lots. Mixed colors brought 23 to 24c and ordinary firsts 21 to 22c. A heavier

movement to the warehouse in the four large markets was registered during the week as compared with the same period a year ago.

The market for nearby eggs was firm in New York at the close of the week. Nearby hennerly white eggs ranged from 22c per dozen for firsts up to 34c for closely selected extras. Brown eggs brought 24 to 26c and mixed colors 16 to 20c.

Broilers were in moderate supply on the New York live poultry market, while fowl were in light receipt. The demand was good for fancy stock but average and poor offerings sold slowly. Prices generally averaged somewhat lower than the week previous. Leghorn fowl brought 22 to 23c per pound, colored fowl 20 to 22c, Rock broilers 25 to 35c, Reds 20 to 28c and Leghorns 15 to 24c. Dressed poultry met a slow demand with prices of nearby stock holding steady. Broilers sold at 25 to 35c per pound.

Butter Firmer

The butter markets were firmer with prices 1/4 to 1/2c higher. Receipts of fresh butter were lighter and the demand was active enough to keep arrivals well cleared. The excess of butter in storage is being reduced and the statistical outlook is improved. Consumption, however, has not increased and many dealers believe that it will not stand higher prices.

The potato market showed some improvement during the earlier part of the week but was dull at the close. The movement of potatoes from the Eastern Shore sections is believed to be about two-thirds over and it is likely that somewhat under 20,000 cars will be shipped.

Eastern Shore potatoes sold around \$3.50 per barrel in eastern markets and at \$2.75 in producing sections. Later in the week prices dropped about 25c. The potato crop in general is in good condition although drouths may reduce yields to some extent. The average production would be around 3.2 bushels, according to the July 1 crop report.

LIVESTOCK

PITTSBURGH

Hot weather, heavy receipts and light demand characterized the cattle market Monday's supply here was 75 cars, more than sufficient to meet the needs of buyers, who bid 50 to 75c or more lower. Trade was slow and sales considerably below last week's level. A lot of Ohio dry-fed steers averaging 1,400 lbs. topped the market at \$9, although other finished cattle of lighter weight were held higher. The bulk of beef steers sold at \$7.95, according to finish. Some inquiry was made for steers and feeders and a few went back to the country at \$5.50 to \$7. No fancy offerings were offered. Common to medium head and were about steady at \$6.07. Most beef cows sold at \$5.60 to \$6.50 with cutters at \$2.75 to \$3.50. Bulls were about steady with sausage kinds selling at \$6.50 to \$7.

Choice steers, 1,500 lbs. or over \$9.00 to 9.25
Good to choice, do. 8.50 to 9.00
Fair to good, do. 8.00 to 8.50
Plain heavy steers 7.50 to 8.00
Choice heavy-weight steers 8.75 to 9.00
Good butcher steers, 1,000 to 1,150 lbs. 7.50 to 8.75
Fair to good, do. 7.00 to 8.25
Ordinary to fair, do. 6.50 to 7.50
Common, do. 6.00 to 7.25
Good light butcher steers 8.25 to 8.50
Fair to good light steers 7.75 to 8.25
Common to medium, do. 7.25 to 7.75
Inferior light steers 6.50 to 7.25
Feeders 6.00 to 7.00
Stockers 5.50 to 6.50
Choice fat heifers 7.50 to 8.00
Good to choice heifers 7.00 to 7.50
Fair to good heifers 6.50 to 7.00
Common to fair heifers 6.00 to 6.50
Choice fat cows 6.00 to 6.50
Good to choice fat cows 5.50 to 6.00
Fair to good cows 5.00 to 5.50
Common to fair cows 4.50 to 5.00
Canners 2.50 to 3.50
Fresh cows, all at side 5.00 to 10.00
Choice heavy bulls 6.25 to 6.75
Light to heavy butcher bulls 6.25 to 7.25
Good handy bulls 6.25 to 6.75
Fair to good bulls 6.00 to 6.50
Common to fair bulls 5.50 to 6.00
Inferior bulls 5.00 to 5.50

CHICAGO

Chicago, July 21.—Today's receipts were 13,000 head. The market was unevenly lower. At the close of last week fair to best heavy steers were quoted at \$7.50 to 10.75, fair to best yearlings \$8.90 to \$9.75.

Four thousand hogs, including 2,000 "directs," made up the supply. The market was 10 to 25c lower, top hogs selling at \$9.75.

Receipts amounted to 15,000 head. The market was 5c lower. Best native lambs sold at \$9.50, westerns \$10.

Produce Market Quotations

PHILADELPHIA
Butter.—Higher than extras, 37c; score, 36c; 90 score, 33c.
Eggs.—Fancy select, 33c; 35c; extra, 32c; firsts, 32c; seconds, 19c; 20c.

Peach Season
The New Jersey peach season has opened and Greenboro are now offered in Philadelphia at prices ranging from 50c to \$1 per basket. Receipts from a number of producing sections in the state indicate that there will be very few late varieties. The peach crop in the United States is estimated to be about the same as 1929, but more than one-half of the indicated production is in California. New York state and several of the New England states have fair crops, but frosts cut yields seriously in Pennsylvania, New Jersey and the Middle West.

The apple market is well supplied at present, but there has been some improvement in quality. The William Red crop is now moving and some of this stock sold at \$1.15 to \$1.50 in Philadelphia and at \$2 in Boston. The commercial apple crop this year is expected to be about the same as in 1929, but the indicated production in the North Atlantic section is nearly one-third larger than that of a year ago. New Jersey and Pennsylvania expect crops exceeding the five-year average. The warm weather has affected the quality of the New Jersey tomatoes arriving in Philadelphia and much of the stock shows severe growth cracks. The first Marglobe of the season arrived late in the week and brought good prices. Some sold as high as \$3.75 per basket while the top price on the early varieties was about \$2.

A wide variety of containers is being used to market the New Jersey crop this season. Among them are the 3/4 bushel, the 20-quart crate, the 12-quart clam basket and a half bushel basket. For a time it appeared that the half bushel basket was most popular but sales do not indicate any decided preference for any type of container and the quality of the tomatoes really sets the price. W. R. W.

New York
Butter.—Creamery, higher than 35c; 35c; firsts, 31c; 32c; seconds, 29c; 30c.
Eggs.—White, nearby, average 27c; extra, firsts, 29c; 28c; medium, 26c; 25c.
Poultry.—Live, by freight, 10c; 2c; broilers, 20c; old roosters, 15c; turkeys, 20c; ducks, 14c; geese, 10c.
Fruits.—CHERRIES, nearby, sweet, bkt., 55c to \$1.10. PEACHES, Jersey, or Los, bkt., \$1.25 to \$2.50.
Vegetables.—POTATOES, Md., bbl., \$2.50 to \$3.25. ASPARAGUS, Jersey, bunches, \$1.94. BEANS, N. J., bkt., 35c to \$1.25. BEETS, N. Y., N. J., bkt., 15c to 20c. CABBAGE, N. J., bkt., 75c to \$1.50. CARROTS, N. J., bkt., 50c to 75c. CELERY, N. Y., N. J., bkt., 75c to \$1.50. CUCUMBERS, Md. & Pa., bkt., 75c to \$1.50. JERSEY, bkt., \$1.50 to \$2.50. PEAS, N. J., bkt., \$1.50 to \$2.50. PARSLEY, N. J., bkt., 75c to \$1.50. PEAS, N. Y., bkt., \$1.50 to \$2.50. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c. JERSEY, bkt., 25c to 30c. PEAS, N. J., bkt., 25c to 30c. PARSLEY, N. J., bkt., 25c to 30c. PEAS, N. Y., bkt., 25c to 30c. MAINE, N. J., bkt., 25c to 30c. ASPARAGUS, N. J., bkt., 25c to 30c. CARROTS, N. J., bkt., 25c to 30c. CELERY, N. Y., bkt., 25c to 30c. CUCUMBERS, N. J., bkt., 25c to 30c.

Farm Practice

By W. D. ZINN

THE following information coming from West Virginia University is of such vital importance to the farmers of not only West Virginia but to those of adjoining states that I clip it. It is just what the writer has been trying to tell the farmers for twenty years. He proved it over and over again on Woodbine farm. Thousands of farmers kill their clover by allowing it to come into bloom and the bloom to turn brown. It will of course die if it ripens the seed, but it will also die if the bloom turns brown even if it contains no seed.

"During a favorable season red clover seeded in the spring may bloom during late summer of the same year," says R. J. Garber, College of Agriculture. "The question arises whether such should be clipped or not. Most farmers follow the practice of clipping the clover where a considerable percentage of the plants have come into bloom. This practice is necessary to save the stand of clover as was shown recently by a demonstration carried out on the agronomy farm.

"Several plots of clover were seeded with oats in the spring and, after the oats were harvested early in summer, the clover on the several plots were permitted to reach different stages of growth before clipping. Some of the plots were clipped before the clover bloomed, others while the clover was in bloom, and still others after the clover bloomed. A few plots were not clipped.

"The clover on the plots that were clipped before bloom and while in bloom came through the winter in fine shape and showed an excellent stand the following spring, whereas the plots which were not clipped as well as those which were clipped after the clover had bloomed showed very few clover plants the following spring.

"Red clover is naturally a biennial; i.e., a plant that lives two years, but if these plants are permitted to set seed the same year that they are seeded, most of the plants apparently die."

Various Questions Answered

I HAVE on my desk several questions that I will answer without publishing the letters containing them.

I see no reason for mixing hairy vetch and alfalfa together in sowing the latter. Hairy vetch is not a spring crop but should be sown in mid-summer and not later than September. If the alfalfa is sown in the spring a bushel of oats should be sown to keep down weeds. It is better for an amateur to start with sweet clover. It has always been harder for us and it will prepare the way for alfalfa as no other plant can. Sow 15 pounds sweet-clover per acre. If alfalfa is sown apply from 300 to 500 pounds superphosphate per acre. Alfalfa can be grown on many kinds of soils in the East and it will pay farmers to try it in a small way and learn whether they have soils adapted to growing it.

BARRING insect pests and corn diseases corn can be grown almost indefinitely on the same piece of ground, but the only excuse for doing it is that a farmer has only a limited number of acres near the silo and wants to grow corn near it to save hauling. Mr. Jas. W. Carskadon of Mineral county, W. Va., has been growing corn in the same field for 16 years and the field is getting better every year. W. P. Ireland of Ritchie county grew corn on the same land for 26 years in succession and the corn got better each year.

SWEET CLOVER cannot be grown on sour soils. It is just as hungry for lime but a little more hardy. It will pay to inoculate the seed unless the land has grown alfalfa or sweet clover before.

Change places with your husband next washday



If your husband did the washing, he would insist on having a new Maytag, for the same reason that he buys power machinery for his field work.

The quick-washing Maytag gives you extra hours to spend in other profitable ways. The gentle, water-washing action makes the clothes last longer... washes everything clean without hand rubbing.

THE NEW MAYTAG

You owe it to yourself to see this latest creation of the world's largest washer factory. The one-piece, cast-aluminum tub is extra roomy. The new-type roller water remover is extra convenient and thorough. The new oil-packed drive is extra quiet and smooth-running.

A Week's Washing FREE

Write or phone the nearest dealer for a trial home washing with the New Maytag. If it doesn't sell itself, don't keep it. Divided payments you'll never miss.

THE MAYTAG COMPANY
Newton, Iowa
Founded 1893
Permanent Philadelphia Factory Branch
Maytag Bldg. 851-3 North Broad St.
Philadelphia, Pa.

The Maytag Aluminum Washer

The moderating influence of type . . .

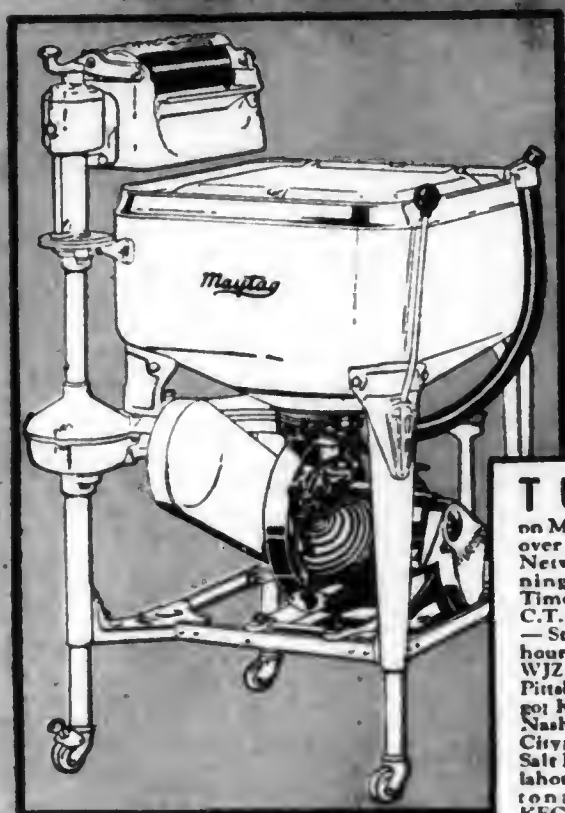
Read, and be guided by, the advertisements in this publication.

THERE is a vast difference between saying something and writing it. The spoken claim that a certain product is "The best in the world," backed by an enthusiastic and forceful personality, may be easily believed. But written down in black and white it encourages disbelief.

Experienced advertisers have found that out. Consequently they make a practice of avoiding statements about their products that might seem exaggerated even though they are actually true. Advertisements as a rule, today, tell less rather than more than can be truthfully claimed for a product.

As a result of this care on the part of advertisers, you will often find the advertised product you buy exceeds your expectations. If it's a tractor it may develop more power than it claims; if it's a suit of clothes it may wear much longer than you expect; if it's a packaged food you may find it even more palatable and convenient than the advertisement described it.

This is certain. You never get less than you expected when you buy advertised goods. Very often you get more. For manufacturers will not spend their money for branding and advertising their wares and, then risk disappointing you; nor will the stores that sell them permit their reputation for fair dealing to be jeopardized.



TUNE IN

on Maytag Radio Programs over N.B.C. Coast to Coast Network Monday Evenings, Daylight Saving Time—9:00 E.T., 8:00 C.T., 7:00 M.T., 6:00 P.T.—Standard Time is one hour earlier.
WJZ, New York; KDKA, Pittsburgh; KYW, Chicago; KSTP, St. Paul; WSM, Nashville; WREN, Kansas City; KOA, Denver; KSL, Salt Lake City; WKY, Oklahoma City; KPRC, Houston; WFAA, Dallas; KECA, Los Angeles; KGW, Portland and Asso. Sta.

THE GASOLINE MULTI-MOTOR

This Maytag engine represents sixteen years development... half a million in use. It is a woman's engine... so simple and compact that by removing only four bolts it is interchangeable with the electric motor. A step on the pedal starts it.

The Churn and Meat Grinder Attachments

These two attachments, sold as extra equipment at reasonable cost, add extra usefulness to your Maytag. The Churn Attachment is made of aluminum, sets over the center post and churns the butter with the same power that washes the clothes. The Meat Grinder Attachment grinds meats, nuts, fruits, relish at two pounds per minute.

F-30-7

PENNSYLVANIA FARMER

Published Weekly

Established 1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

August 2, 1930



Philadelphia

Pittsburgh

Harrisburg

"I made a test of fertilizers and chose Swift's Red Steer"



John T. Bateman, Booneville, Indiana

"In a bad season, with the local average less than 8 bu. per acre, I made 20 to 21 bu. of wheat per acre," writes John T. Bateman, Booneville, Indiana. "I used Swift's Red Steer Fertilizer."

"I tried other fertilizers at the same time but Red Steer gave me the largest yields."

Be sure to look for the Swift Certificate of Quality, attached to every bag.

It assures:
BEST MATERIALS—plant food from the most productive sources.
DOUBLE MIXED—fertilizer thoroughly and evenly mixed and in good drilling condition so that each plant will get its share of plant food.

TRIPLE TESTED—in modern laboratories, assuring the right plant food in the right form and amount.

Make the Swift Certificate of Quality your buying guide. Get big yields of plump, premium wheat, maturing 3 to 10 days earlier. A good clover catch and more hay.

Ask your A. S. A. (Authorized Swift Agent) about Red Steer high analysis 4-16-4 or 4-16-10 for wheat. And have him give you our free booklet on fertilizing wheat. Or write to the nearest Swift office listed below.

Swift & Company
Fertilizer Works

Baltimore, Md. Cleveland, Ohio



Swift's Red Steer Fertilizers
"It pays to use them"



My two-year-old ewe and her four lambs which she gave birth to March, 1930. Two of the lambs were male and two female. These lambs on June 21st weighed 62, 67, 74 and 79 pounds and the mother clipped 11 pounds of wool. If any one can top this for a lamb record let us hear from you.
M. S. Bricker,
Franklin county, Pa.

If You Were a Dictator

By ALVA AGLI

VARIOUS countries, at various times in their history, have had the governing done by a dictator. It must have been a big responsibility for him. The dictator must have realized that he did not know what course to pursue much of the time, but there was no other one to make the decision and take the responsibility. Well, let us suppose that you, individually you, were dictator in this country for the time being and had the wheat situation to straighten out, what would you do? That is a fair question.

You might see that responsibility for the present situation must be shared by our government. During a term of years influential members of the Congress have held that home prices of export crops could be controlled by an exporting country, and when there was legislation enacted and the machinery set up to attempt price control, wheat was seeded in the belief that government could do things that most economists warned could not be done.

The situation is made worse by failure to market wheat at what now seems a pretty good price last fall. Our Bureau of Agricultural Economics and our Farm Board believed that world prices would be good. We attach no blame not a bit but they are government agencies and thus share responsibility for some part of the present state of affairs. We did not export when we could. This is not something blame-worthy, but there must be recognition of the fact that the government shares responsibility with the growers.

Plunged into the difficulties of a dictatorship, you might give attention to the fact that Europe did not take kindly to serious dependence on the United States for its bread when this country was arguing for years about means for handling our wheat surplus. Efficient means of reducing its dependence upon us were found, and we seem to be on the way to losing much of our foreign demand for wheat. Here, too, the responsibility attaches to the government.

As a sane, level-headed dictator, in your analysis of the situation you would not be seeking to blame anybody, knowing that all concerned have honestly tried to do what they hoped would mend matters, but you must determine how far responsibility rests upon the government. Likewise, you must know how great is the injury to all the people that flows out of the distress of the wheat growers.

You would note the fact that Canada has been marketing wheat. Her potential wheat area is immense, and you probably would decide that she will stay in the wheat-production business on an increasing scale and

that she cannot be expected to stand fast with us if we should continue our venture in price control. Her interests demand that she look out for herself.

You probably would decide that the situation in the southern hemisphere, in western and central Europe, in Russia and in Canada, is such that the world is in the way of having continuous excess production of wheat, just as is the case with oil and copper. A single year, or two, might bring crop failure, but new wheat seeding and harvesting machinery and state policies run together to keep the world supplied with cheap bread.

Disregarding all criticism, you probably would determine that any seemingly direct assistance to the wheat industry would be only fair recognition of the responsibility of the government for the presence of a big surplus of spring wheat just when our winter wheat should be finding a market, and also that any assistance would be indirectly for the good of all industry in this country. You would bear in mind that tariffs have helped to make manufacturers rich, and that farmers have not had an equal share in the benefits.

Four facts might stand out in your thinking: 1. If there were no surplus now in this country, the price of wheat would be the world price plus our present high tariff on wheat. 2. The world price promises to be continuously an unprofitable one, and therefore a reduction in acreage to home needs would not be any additional hardship in itself. 3. An acreage restricted to home needs, with the home price put on the protective tariff plane, would give wheat growers far more profit than they now have. If the present surplus, for which the government is partly responsible, were taken off the market by the government, it could be held to meet foreign need in some year of shortage that comes now and then. 4. There could be no future surplus, except in a year of unusually good yields to balance a following time of short yields, because, as dictator, you would have the prorated acreage continuously in your program.

As dictator, you would bear in mind that your plan might not please any one, but that should be a minor matter to a dictator. Conservatives would be horrified at doing something never done before, and others would condemn you for abandoning the idea of price control being practicable for a country while it continued on an exporting basis. If the people were permitting themselves to be led by the control of you as dictator, it would be most inconsistent in them to object to dictation regarding their plans on their own farms. And as a dictator's business is to attend to his job of dictating.

Spring Seeding Failed

By W. D. ZINN

ON account of the severe drouth many farmers report that their seeding in wheat and oats has failed. They ask whether it would be safe to prepare a seed bed and reseed the oats and wheat stubble. If so, how should the seed bed be prepared?

We usually have about the same amount of rainfall each year. If this is true we are due a lot of rain between now and the first of the year, and this should make an ideal condition for fall seeding. Some of the best meadows I have ever seen were produced by fall seeding. Many have asked if they should wait until spring to do the seeding. A meadow thus seeded will produce but little more than half as much next year as a meadow seeded this fall.

The seed bed should be prepared by thorough disking or harrowing. I would not have a breaking plow used if I could have it done for nothing. It is very difficult to get a good seed bed for grass or small grain if the plowing is done in the fall.

If grass is seeded alone it is a good plan to sow from one-half to three-fourths bushel of oats. This will hold the weeds in check and when the oats are frozen down in the fall will make a good mulch to protect the grass through the winter.

A great many farmers are adding hairy vetch to this seeding and are very much pleased with it.

A Good Cover Crop

A FARMER asks what he can sow in his corn at last cultivation to make a cover crop for the winter. If crimson clover will stand the winter with him there is nothing better to sow than it and hairy vetch. It might be good policy to sow crimson clover, hairy vetch and sweet clover if the land has been limed. Eight pounds of each per acre will make a good seeding.

Wheat for Hay

A WEST VIRGINIA reader says that he does not want to grow wheat for the grain but wants to cover the ground for the winter. Would it pay to sow wheat for hay? Many farmers are doing this and are loud in their praise of wheat hay. It can be greatly improved by sowing 15 pounds of inoculated hairy vetch per acre. No legume makes a better hay than vetch, but it needs the wheat to hold it up. I would sow not less than two bushels of wheat. The vetch is an advantage when it comes to harvesting the crop; it holds the wheat together and makes it easier to handle. One farmer harvested 100 large loads of this crop this season.

Wheat cut at the proper stage is better to feed than timothy and when mixed with vetch is very much better. With this thick seeding it would appear that one would have no chance in the spring to get a stand of clover and timothy, but I have had no trouble along this line.

Supply and Demand

CHAIRMAN LEGGE of the Farm Board is telling farmers, and rightly so, that the only practical way to raise the price of wheat is to cut down the production. In other words, he is saying that the law of supply and demand governs prices.

The writer has stock in an orchard company. A few years ago we had a large crop, but when the season closed we did not have a dollar profit. The supply was so great that we could not market our apples at a profit. Later we had about a tenth of a crop and the production in other orchards was correspondingly low and yet with the good demand we had for our apples we made a little money.

Mr. Legge has a herculean task on his hands, that of inducing the wheat growers to cut down acreage. We shall see what we see.

Tired Pastures need Sack-of-Silage now

NOT only has the Summer sun burnt up many a pasture—but the older grass does not have the same succulence it did in Spring.

It's easier, and less expensive, to keep up the milk flow, than to bring it back after it has slumped.

Keep cows happy, and the milk pail full, with succulent, palatable Sack-of-Silage.

More digestible nutrients, more lime, more bulk than wheat feeds. More milk, and better condition for your cows when pastures are drying out, and heat and flies bother the herd.



Since 1842 four generations of the Eshelman family have been in the feed business. The men who make Eshelman feed for you are most of them farm-raised. They bring a knowledge, an interest, a pride to their work—which produces better feed.

JOHN W. Eshelman & SONS
(ESTABLISHED 1842)
LANCASTER, PA.

Eshelman
GUARANTEED FEED

for cows, calves, steers, hogs, horses, pigeons and poultry



Eshelman

CALF MEAL

A calf can be raised on this feed just as successfully as on pure milk—and at considerably less cost. You can raise a good calf for less money than it costs to buy a good cow.



Eshelman

RED ROSE

A strictly high-grade 55% grain mixture, well balanced and digestible. Sufficiently bulky to prevent colic.



Eshelman

LANCASTER 20 DAIRY FEED

An efficient milk producer carefully built and balanced. A complete ration when fed with average grade roughage, such as good mixed hay.

There is an Eshelman Guaranteed Feed to meet every feeding requirement of livestock and poultry—backed by 87 years' experience—made of only the finest materials—economical.

25¢
cow book
FREE
please send me one.
I am also interested in:
☐ horses ☐ hens ☐ hogs.

Dibble's Seed Wheat

Honor—recommended by New York Department of Plant Breeding as the best White Wheat. Over 100 acres on the Dibble Farms and we offer 3,000 bushels of our own growing reseeded and graded at \$1.50 per bushel, yields of 37, 40, 45 and 50 bushels per acre on large fields right here at Honesee Falls.

Russian Roux—\$1.50 per bushel. Northern grown Grimm and Common Alaska and other desirable seeds for August and September sowing. Seed for Circular Price List and Samples to

EDWARD F. DIBBLE SEEDGROWER
Box F. Honesee Falls, N. Y.

Easy Payments on Brown Fence

My New Catalog shows 128 pages of money saving bargains in Brown Fence, Barbed Wire, and other farm supplies. Write for free catalog. The Brown Fence & Wire Co., Dept. 100, Cleveland, Ohio.

Reading Bone Fertilizer

Quality Service Satisfaction
HIGH GRADE FERTILIZERS
READING MEAT MEAL
DOW'S AGRICULTURAL SPRAYS

(This trade mark means quality)
Ask your dealer for Reading Bone Fertilizer
We will mail a 5 lb. package of 16-4-16 Plant Food to any address upon receipt of \$1.00.

Reading Bone Fertilizer Co., Reading, Pa.

Get Rid of CANADA THISTLES

The Little Wonder Weed Exterminator will positively destroy them.

A spraying solution (not a chlorate); costs only 6¢ per gallon; will not ruin the soil nor kill cattle. Write for free illustrated booklet.
REBER CHEMICAL COMPANY
Reading, Pa.

SAVE AND BUY

Quick Acting
Fine as Flour
Low Cost
ALBA MARL
WRITE FOR GUARANTEED DELIVERED PRICES TO:
ALBA MARL LIME COMPANY, CHARLESTOWN, W. VA.

Nature's Soil Remedy

All Available
Granulated For
Easy Sowing

SAVE what you Worked to PRODUCE

Quit losing your profits through mold, shrinkage, rats, fire, etc. Get the metal crib that produces better grades, cures corn perfectly and protects it afterwards. Wonderful BUCKEYE ventilating system plus 100% protection. Strongest metal crib made. Low cost. Lasts a lifetime. Quickly pays for itself. Write today for prices, export payments, Special discount for early orders. Agents wanted.

The Thomas & Armstrong Co.
157 Main Street (1) London, Ohio
THE CRIB WITH THE STEEL RIB

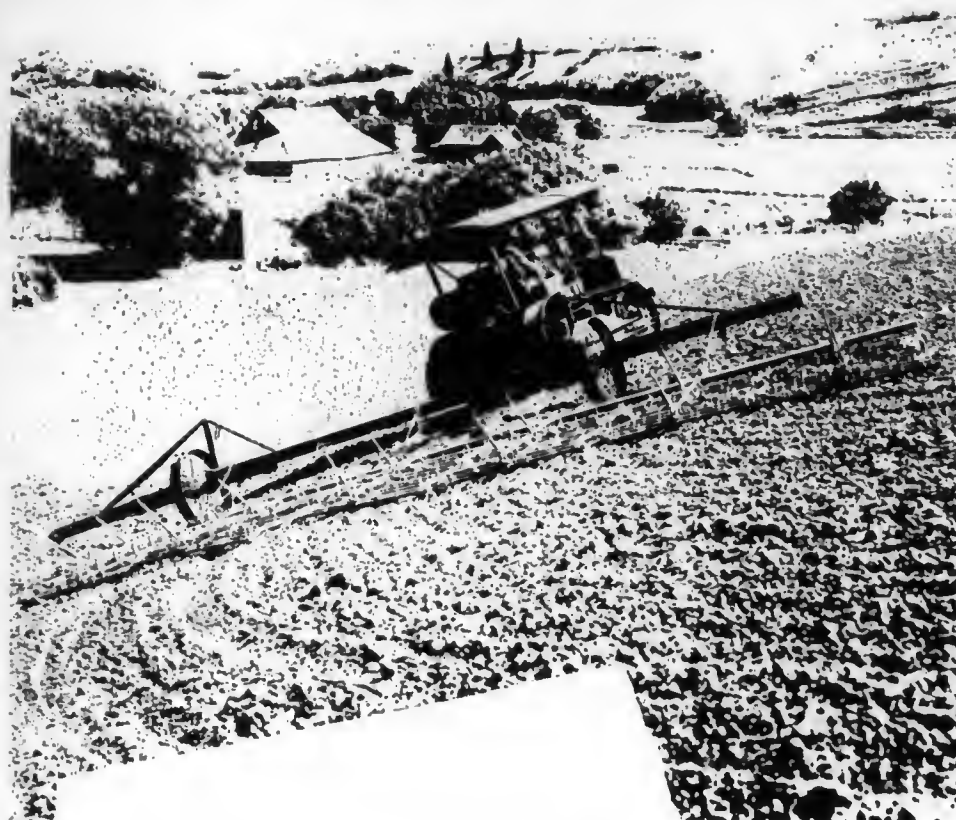
CORN HARVESTER

Best and fastest machine built. One and two row models. One horse. Carry 100 shocks. Big labor saver. Pay for itself in one season. Worked by 1, 2 or 3 men. Write for free catalog. Great for silage cutting. Free trial Agents Wanted. Write for free catalog.
BENNETT MFG. CO., Box 705 Waverly, Ohio

Write for free catalog.

Read the Advertisements

they help you get the most out of life and save you time and trouble doing it.



The world looks level to a "Caterpillar" farmer

LEARNING to depend on the husky, unfaltering power that does good work on steep grades—the farmer who has a "Caterpillar" Tractor forgets the hills.

He sees bumps taken out of the weather—timely farming for him—with days enough and sure-gripping, track-type traction to do every job the way that insures full yields.

And he's able to flatten high spots in production costs—to leave bigger margins of profit and constant ones through the years.

He farms in greater comfort—getting the most out of every season—every field with a "Caterpillar" Tractor.

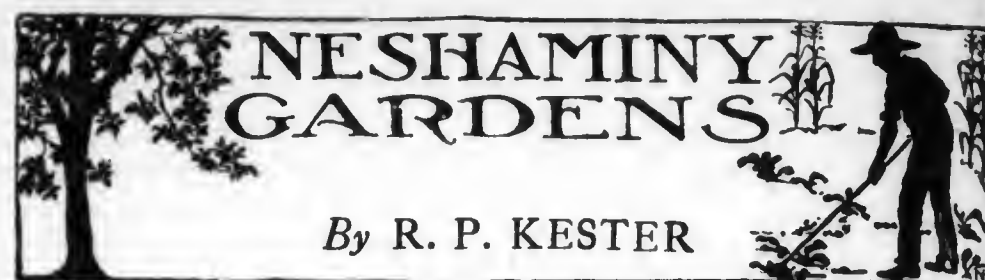
Prices—f. o. b. Peoria, Illinois
TEN . . . \$1100 TWENTY . . . \$1900
FIFTEEN . . . \$1450 THIRTY . . . \$2375
SIXTY . . . \$4175

Caterpillar Tractor Co.

PEORIA, ILL. and SAN LEANDRO, CALIF., U.S.A.
Track-type Tractors Combines Road Machinery
(There's a "Caterpillar" Dealer Near You)

Barnard Tractor & Equip. Co., Inc. . . . Harrisburg
Beckwith Machinery Co. . . . Pittsburgh
Northern Central Tr. & Equip. Co. . . . Williamsport
Penn Tractor & Equip. Co. . . . Philadelphia
Powell-Davies Tractor & Equip. Co. . . . Wilkes-Barre
Waddingham Tractor & Equip. Co. . . . Bradford

CATERPILLAR
TRACTOR



By R. P. KESTER

THERE was little change in homes, social life and rural institutions between 1880 and 1900. This was because the things which brought about present conditions had not yet come into being—good roads, automobiles, radios and electrical equipment. It might also be added that most of the farm machinery as we know it today came into general use in that same period. I want here to emphasize what I wrote in a former article, that family and social life in the country was notably different from that of the present because the forced isolation compelled the development of local talent.

Our old community had a reputation almost from its first settlement in 1810 as an intellectual center. Of course the word "intellectual" is used in a comparative sense. There were few, if any, college graduates from that neighborhood during the first three-quarters of a century after its settlement. But many of the first settlers and descendants were natural students, mechanics and investigators. And this was true of most of the original centers in the last century. It is from such stock that America produced the generation that put this country ahead of all others.

Mental Exercise

Organizations and meetings of an intellectual nature had been held in the neighborhood from the first. Father and mother used to tell of the good times they had at these gatherings in their single days. I have myself seen the minute books and the programs carried out were such as would be called "too serious" today. Questions of government, morality, education, religion, etc., predominated. They also had a "paper" prepared and read at each meeting. An editor was appointed who got together a paper consisting of 24 to 36 pages of foolscap paper, and containing articles of timely interest, some of them long and very much involved. I cannot imagine a modern crowd of young people being entertained week after week with that kind of entertainment. But mother said everybody went and enjoyed the meetings.

Practically the same conditions existed in my boyhood, and even after I was old enough to take a part in social life. We had a literary society which met every two weeks. Programs consisting of readings, recitations, essays, music and dialogues were got up. We also had a "paper" after the manner of our fathers, but I am sorry to say it was much more frivolous as to contents. About once a year we got up a drama and presented it to the public. An admission fee was charged to raise money. I never knew a production of this kind that did not meet with the thunderous applause of the neighborhood, possibly because every family in the neighborhood had one or more in the caste.

Debating Societies

For a great number of years we had one and sometimes two debating societies. Some of the older men held monthly debates at which the most serious national and international questions were discussed and disputed in a spirit that would have done credit to a Webster or a Clay. We boys and young men, taking the cue from our fathers, had our own debates. We debated the relative values of fire and water, men and women, money and education, reputation and character, etc. Spelling bees in the winter time held in the schoolhouse drew the people for miles around.

Singing schools led by men who could read music by sight with more or less correctness were popular with the young people.

I am mentioning all these social activities here, activities which have been dropped in the present age, because the conditions forced people to supply for themselves some form of amusement and entertainment. Not only was there no opportunity to attend many professional or commercial kinds of amusement, but there was little money to pay admissions if they had been available. An inconsistency in regard to the last statement comes to mind. One of the best attended forms of entertainment was the medicine shows. No admission was charged and magicians, comedians, Punch and Judy performers, etc., did their "stuff" at no charge, unless one counts the cost of countless bottles of "medicine" disposed of between the acts.

Clubs and Institutes

But people were no less active in the more practical and serious things pertaining to the social life. There were no women's clubs, in the sense that we know them today, but the women got together for practically the same reasons, to compare life's experiences. They had their quilting, sewing circles, carpet-rag sewings, church committee meetings, etc. The men had their farmers' clubs, and later the Grange meetings at which both men and women were to be found.

Bigger and more important than any of these were the old-fashioned farmers' institutes. These meetings whether held under direction of the Secretary of Agriculture, or got up by a Grange or farmers' club, were the climax of the year in farmer meetings. Imported speakers, special music and everything that would aid in holding up the standard of agriculture, and help to impress its importance on the people was put into the preparations for this annual meeting.

As one who enjoyed them as a boy, and who later helped to conduct them in every part of Pennsylvania, I am willing to stake my reputation on the assertion that no institution, before or since, has been as big a factor in arousing rural people to the possibilities of agriculture, or of impressing the need for better methods in production and marketing.

Thistle Chasing

AFTER having rented our farm for a dozen years we found a lot of big Canada thistle patches eating up the fields. In several patches not a thing could grow but thistles—in other patches any crop would be badly choked. We now feel as if we are on the home stretch in the matter of thistle chasing.

The time par excellence for fighting thistles is in the corn crop—you go row by row and can be thorough and systematic. In the spring we want several sets of cultivator shovels fresh from the blacksmith's anvil and after directions to make them sharp as a jackknife. Each half day thereafter the shovels are taken off and filed to the same keen (rough) edge. If the thistles appear before the corn is large enough to cultivate hoe them with vengeance. Carry a file and keep the hoe at a dangerous edge. Most bystanders tell us they have hoed thistles and that it does no good to hoe them—they come right back. When the thistle comes back we come back too and we come back just as often, and one time oftener, that time to find the thistle dead.

G. P. Williams.

More Readers on Farms in Pennsylvania than Any Other Farm Paper

President Arthur Capper
Vice-President T. D. Harman
Vice-President Geo. M. Slocum
Editor-in-Chief E. S. Bayard
Manager Neff Laing

PENNSYLVANIA FARMER
Published Weekly
Established 1877

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of Mar. 3, 1879.
PUBLISHED EVERY SATURDAY BY

CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., August 2, 1930

No. 5

The Editor Embarks on a Research Expedition

By E. S. BAYARD

ONE hundred years ago the first nitrate of soda was exported from Chile. This year the centenary of this now great business is being observed, and our distinguished party is on the way to participate in the celebration. The party consists of the following persons, most of whom will be recognized as high authority on soils, fertilizers and crops. There are a few who don't rate as high authority on agriculture, but they are enjoying the trip as much as anybody. The personnel of the delegation:

J. G. Lipman, dean of the New Jersey College of Agriculture; R. W. Thatcher, president of the Massachusetts Agricultural College; Wilmon Newell, director of the Florida Experiment Station; R. M. Salter, chief of the department of agronomy, Ohio State University; Andrew M. Soule, president of the Georgia State College of Agriculture; A. T. Wiancko, head of the department of agronomy, Purdue University; C. E. Blackwell, director of the Oklahoma Agricultural Experiment Station; U. P. Hedrick, director of the New York Agricultural Experiment Station, Geneva; Alfred Kahn, Little Rock banker; J. W. White, soil technologist, Pennsylvania State College; E. C. Brooks, president of the North Carolina State College; J. E. Metzger, head of the department of agronomy, University of Maryland; T. C. Johnson, director of the Virginia Truck Experiment Station; and E. S. Bayard, editor-in-chief of the Pennsylvania Farmer and the Ohio Farmer.

Rough Sailing

We have been five days at sea, heading south all the time, and we have had smooth sailing until we hit the Caribbean, which hasn't been so smooth. In fact the ship has climbed around over the waves in every direction and tables, chairs and other movables have occasionally skated around—but without any damage. It is noticeable, however, that the assembly in the dining salon is not what it was in calm water.

The ship Teno of the Compania Sud Americana de Vapores is a staunch and comfortable vessel. There is plenty of room for everybody and everything. It is a relief to see that in contrast to the crowds aboard the liners to Europe. The weather has been hot, but it seems to get little hotter as we approach Colon. We are told that it will be quite warm in that town.

All of us are dressed in light-weight and mainly light colored clothes, and full dress for dinner is not required. One improvement might be suggested. Of the ship's employees only a few speak English. Spanish is the prevailing tongue, but some of the passengers speak Portuguese too and an occasional one French. One five-year-old laddie speaks all of these, but his father tells me that he is trying to get him away from Portuguese. I have found that the people of our country are the least skilled in languages foreign to them, and probably the Spanish speaking nations are next worst in this respect.

How Far Can a Fish Fly?

Life aboard a ship consists largely of amusement, anything to while away the time. There are several games and pastimes common to all ships—shuffle-board, golf, ring toss, horse-racing, cards and dice.

The horse racing is conducted by the ship's officers. Six horses run the course according to the way the dice turn up, from one to six. The betting is active, 25c per ticket, and those who pick the winner take all the money—no deductions for any cause. If I remember correctly on the North Atlantic liners a small percentage goes to the Seaman's Aid fund.

Other games are all private enterprises and sometimes they run into gambling, but this is not the rule. One young man aboard this ship lost \$100 shooting craps the other night. A member of our party told me that the loser could not afford such expensive amusement. Maybe it will be a good investment for him. It will be if it teaches him to avoid such things the rest of his life.

The distinguished scientists in our party are not doing all the research. I am going to carry on two interesting projects myself. I have made some observations and can report some progress in one of them. The ship stirs up thousands of flying fish. Some of them merely take a short flight and dive in again. Others soar for a considerable distance.

Nobody seems to know how long a flying fish can or does fly or how far. I have been timing

them, but will have to leave the distance observations to a party better equipped than I am. My equipment consists of a stop watch. Thus far I have found no flying fish to remain in the air more than twelve seconds. A goodly number will fly over ten seconds, the vast majority for less than five seconds. When I get enough observations to strike an average I will calculate it, but I will leave a nice little hole to crawl out of in case my conclusions should be challenged by other scientists. That is the way all other investigators do and it's a safe plan even if it doesn't lead us to be dead sure of anything in particular.

Some years ago a scientist in the United States Department of Agriculture made the ultra-conservative statement that fish live mainly in streams and other waters. I commented thereon and sent him a marked copy. He was a good sport and wrote me a nice letter, admitting that his statement was a bit beyond what safety required.

Some day we may be able to say definitely how long a flying fish can fly, but not yet. What's the use of finding out? That's what has been said of every new line of research, including all expeditions to both poles. The true scientist will find some way to justify all research.

Another Research Project

Pull the plug out of your bath-tub or your wash-bowl and see how the water runs out. You will find that without any interference it will always run from left to right, or clock-wise. Try it and see for yourself. I am told that south of the equator the water runs out from right to left, or counter clock-wise. I am going to find out.

It would seem that if the above is correct there would be a point, exactly on the equator, where the conflicting currents would prevent it from running out at all—but it's hard to believe that water won't run out of any hole in any vessel anywhere—unless frozen in. Right here somebody will bob up and say it's not of the slightest importance which way water runs out either north or south of the equator. But the fact that somebody studied it was worth millions to the glass industry—which must run its machines counter clock-wise to keep the bubbles out of the glass-ware. (Continued on page 15.)



The Steamship Teno and Passengers Bound for the Nitrate Fields in South America

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published Every Saturday by
CAPPER-HARMAN-SLOCUM, INC.
7301 Penn Ave., Pittsburgh, Pa.

President: T. D. Harman, Arthur Capper
Vice President: Geo. M. Slocum
Manager: Neff Laing

Editorial Staff
Editor-in-Chief: E. S. Beard
Editor: C. L. White, M. C. Gilpin
Field Editors: Miles Horst, G. W. Harris

EDITORIAL OFFICES
Pittsburgh Harrisburg Philadelphia

CONTRIBUTING EDITORS
H. E. Keeter J. G. Lipman
Alva Agee H. C. Knandel
L. W. Lighty R. L. Scharringhausen
R. C. Blasingame A. A. Borland
J. F. Shirley W. Fletcher
W. D. Zinn Mrs. Gertrude Stewart
F. L. Bentley Gilbert S. Watts

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Cash in advance. Single copies 10 cents. Extra for postage.
Canada subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for livestock and classified advertising. No deception, immoral or misleading advertisement inserted at any price.

Member Agricultural Publishers' Association.
Audit Bureau of Circulations.

Volume 103, No. 5 Established 1877

PASTURE IMPROVEMENT

THE effects of pasture fertilization show up clearer in a dry than in a wet season. Recently we saw a pasture which had been limed and fertilized and which was uniformly good, while a spot left for comparison was totally devoid of living vegetation except a little worthless moss. On other farms in the neighborhood the pastures were brown and sere. It pays to improve our pastures, and it pays best in poor pasture years.

FOR TAX REDUCTION

NOT only interest but action in regard to tax reduction is taking place in this territory. Lancaster county has formed a tax-payers' league to promote reassessments of real estate values and several counties of West Virginia have revised their real estate valuations. This is attacking the problem in a definite and effective way. The result of such action will be watched with interest and should give us valuable information for other communities to consider when their tax burdens are too heavy.

STREAM POLLUTION

PICNICS are joyous occasions—or should be. It's good for man to throw off his daily cares and in the open air commune with his fellow beings, ignoring the ants in the sandwiches and the sand in the pies. But that gives him no special rights to decorate the landscape with waste-paper, shoe boxes and banana peels. Another crime laid to the carefree and the careless picnickers is the pollution of streams by dumping garbage therein and killing innocent fish. The chief attribute of a picnic is the cleanness and freshness of nature. Let us keep it so by good picnic manners.

TWO BULLS ATTACK

SEVERAL readers have sent us the story of Mrs. Thomas G. McClure, 51 years of age, who on July 17th at her home near Fort Defiance, Va., was gored to death by a bull. The tragedy occurred when Mrs. McClure went to the pasture to drive the cows into the barnyard to be milked. The bull attacked without warning and so quickly that Mr. McClure who was 150 yards away could not effect a rescue. The animal was known to be dangerous, having attacked other persons before. Mrs. McClure was the mother of six sons.

A three-year-old Holstein, apparently craz-

ed by the heat, attacked Paris Bitting and his son Dale of near Neponset, Ill., recently when they, armed with pitchforks, tried to drive him from a watering tank to his stall. This bull was dehorned and his victims succeeded in escaping but with severe injuries. The bull was ordered killed at once. And yet many farmers follow the practice of allowing the sire to run with the herd, lulled into a false sense of security by the bull's former peaceful record. It's risky business.

TO PREVENT MISFITS

CHANGES of ownership of New York farms has led the Department of Agriculture in that state to establish a service designed to tell a man if he is qualified to succeed on a certain farm. The object is to prevent misfits. If it can be determined beforehand if a prospective farmer is adapted to farming in a certain section it should be a service to the farmer and to the community. The trouble is that some apparently no-account folks can dig a living out of land on which their self-styled betters would starve.

OPINIONS DIFFER

WHETHER retail prices are following the downward trend of the wholesale market is a point of controversy. Consumers complain that they pay as much for meat as when livestock prices were higher, while surveys reveal recent declines in retail meat prices. Evidently somebody is coloring conditions to conform with his wishes. Both producers and consumers want retail and wholesale prices to be close together, or at least to move in unison, and any discrepancies will be shown up until they do get in step. The retailer's position is made more difficult with people out of work and unable to pay cash. It costs something to carry them along. His volume of business and net profit do not look big to him when they seem immense to others.

TO MARKET LIVESTOCK

THE National Livestock Marketing Association has at last been formed, although without some dissenting cooperatives that have never favored it. The purpose of the Association, judging from the announcement of its formation, is to narrow the spread between what the consumer pays and the producer gets. This is to be accomplished in part by informing producers regarding the needs of packers and advising them when to sell. This information is now available and we doubt if it will be much more effective when backed by a national organization. It is said that eventually the Association should be able to exercise a high degree of control over the meat supply of the nation. If it can effect economies in distribution it will perform a service for the livestock industry and need not worry about control. If it cannot do so it may be concerned about excuses.

BOULDER DAM

WORK on Boulder Dam has started. The first ten million of one hundred and sixty-five million dollars of tax-payers' money has been appropriated by Congress and the project which is to raise the surface of a river 600 feet begun. It will create a reservoir 86 miles long which will hold enough water to cover 30,000,000 acres of land a foot deep. Machinery to produce a million horsepower will be installed. This is doing things in a big way and will be looked on with pride by many people, especially the comparatively few who will benefit by it. The fact that it will irrigate 400,000 acres of fertile but now dry southern California land will not be greeted with enthusiasm by food producers who at present face plenty of competition. But the thing to give us pause is

that here our government is stepping out into a new field, instituting improvements for local benefit and entering the "giant power" business. The wisdom of this course has been repeatedly questioned. Now we can await the final answer to all such questions—the result of experience.

THE DROUTH

FOR weeks a sizzling sun has poured down on most of this country between the Rockies and the Atlantic. The drouth is a record breaker, according to the Weather Bureau, which says it may rank as the most widespread since comprehensive records were begun 50 years ago. The extent of damage to crops is unknown, but varies widely with local rains favoring some sections and will depend on moisture conditions from now on. It is serious enough, however, to draw attention to the weather's influence on yield, and the weather is controlled neither by the individual nor the government.

WEED SEEDS

ATTENTION to the longevity of weed seed is drawn by M. T. Munn of the New York Experiment Station who refers to tests begun in Michigan nearly 50 years ago. In these tests seeds from troublesome weeds were buried and some dug up every five years and tested for germination. After 40 years part of the seeds are still alive. This may solve the mystery of where weeds come from on clean soil. Some time in the hazy past their ancestors inhabited that plot of ground. About our only hope of getting the best of weeds is to prevent them going to seed; we can hardly hope to outlive them.

A CLEAR-CUT PROPOSITION?

"COOPERATIVE marketing of fruits and vegetables has not become the clear-cut proposition that is to be found in grain, cotton or some other agricultural products," said Charles S. Wilson of the Farm Board at the American Institute of Cooperation. Yet the fruit and vegetable growers have the experience of the grain and cotton farmers to guide them and they are at liberty to follow the footsteps of others if they choose. Is it possible that they do not see the clear-cut gain that is so readily discernible to the Farm Board member?

CREDIT AND BLAME

WHEN prices go up all friends of the seller are willing to assume at least some responsibility for the advance, but when prices go down nobody cares to take the blame. The Farm Board, being a public agency engaged more or less in price manipulation, is a handy institution to blame at present and plenty of censure is pointed in its direction. However, the Board does not intend to accept credit for low prices and Chairman Legge says so in the following pointed language:

"The farmer's problem is an economic one that will never be solved by any political remedies. If the present drouth continues much longer there will probably be a large reduction in the wheat surplus due to substitution for feed grains. Probably these politicians who are blaming the Board for declining prices brought about by excessive production will try to give the Board credit for any relief from the wheat surplus brought about by the drouth—and with equal reason."

The Board is not responsible for a low level of prices any more than it will ever create permanently high prices if conditions do not justify them. These things are beyond control of either boards or politicians.

New Jersey Farm Comment

By G. W. HARRIS

NEW YORK state reports a normal apple crop, while most other producing regions figure a lighter crop than last year. The 1930 apple crop for New York state is estimated at one and one-tenth million barrels more than in 1929 while the commercial crop for the entire United States is approximately the same as last year.

The Shenandoah-Cumberland valley will have slightly more than a million barrels less, Michigan but two-thirds as many as in 1929, and the Ozark region one hundred thousand barrels less than last year.

H. C. BARKEE, superintendent of advance registry work in Maryland, brings to light some figures from a recent Jersey sale in that state which show the advantage of advance registry testing. The record cows and their daughters brought a total of \$988 more than the untested cows and their daughters.

Ten cows with Register of Merit records averaged \$214 per head, as compared with \$171.50 for the eleven cows without records. The daughters of the cows with records brought \$195 per head, while those out of untested dams brought \$131.60.

This only goes to prove that dairymen of today are less willing to buy a "cat in the bag" than in former years, but are buying animals of known production which can return profits above feed and labor costs.

A FARMERS' Marketing Conference, sponsored by the extension service of the University of Maryland, will be held at College Park, Maryland, from August 12 to 15. At this state-wide meeting, the first of its kind to be held in Maryland, problems relative to the marketing of farm products will be discussed.

HOLSTEIN breeders will gather at Forsgate Farm, Middlesex county, N. J., on August 6. H. H. Wing, president of the National Holstein Association, will be one of the speakers at this annual field day of the New Jersey association.

A heifer calf is being offered to the person, adult or junior dairy club member, who most nearly judges the average yearly production of a group of daughters of each of three living sires at Forsgate Farm. All the milking daughters will be on exhibition for the contestants.

In addition prizes will be given to the three junior dairy clubs having the greatest attendance. The winning club will receive a heifer calf from the association, while second and third prizes will be \$25 and \$10 in cash.

EACH year we find an increasing interest and desire on the part of farm boys and girls to become better acquainted with each other and learn to work together. This tends to develop rural leadership.

Nearly 600 Maryland boys and girls are expected to attend the twelfth annual Four-H Club week which is being held at the University of Maryland campus from August 7 to 12. This year the minimum age limit for delegates has been raised from ten to twelve years.

Ten counties are sending teams of two boys each, to the Four-H camp to demonstrate better methods in dairying. The best of these teams will be sent to the Timonium Fair in September and the winner there will represent the state during the National Dairy Show this fall at St. Louis. Arriving at College Park ahead of the regular delegates will be a group of 40 All Stars, an honorary group of Four-H Club members, who will take care of the work and details of the camp. Leadership training, in both work and recreation, in order that these delegates from all parts of the state may learn to better assist their home communities, is the object of the week of camp life. While in camp they will spend a day sightseeing in Washington.

E. G. Jenkins and Miss Dorothy Emerson, state boys' and girls' club agents, have charge of Four-H Club Week and will be assisted by Miss Pauline

Spangler, a club leader in West Virginia; Mrs. Edith Craig, of Boston, and Dr. R. G. Foster, of the U. S. Department of Agriculture.

THE Hunterdon County Board of Agriculture and interested farmers in the county plan to tour to the National Farm School at Doylestown, Pa., on August 5, where they will spend the day.

CHESTNUTS, the gathering of which used to play an important role in the school life of many farm boys during the frosty fall months, may again in time be found throughout our eastern hills. During recent years federal forestry agencies have been seeking varieties of chestnuts resistant to the blight which has destroyed most of the trees in the eastern states.

Ten plantations of Chinese and Japanese chest-



THE New Jersey Agricultural Experiment Station, founded at New Brunswick in 1880, will celebrate its fiftieth anniversary on October 8 and 9. Local, national and international agricultural scientists and leaders will pay tribute to those who have contributed to agriculture through their tireless efforts in the establishing and development of the Experiment Station.

Memorial tablets to Dr. George H. Cook and Dr. E. B. Voorhees, first and second directors of the Experiment Station, will be unveiled on the campus of the Agricultural College and Experiment Station.

It was through the untiring efforts and leadership of Dr. Cook that the Station was founded. He served as director from 1880 until his death in 1889. Dr. Voorhees, well-known and loved by many New Jersey farmers, carried on and enlarged on the work of Dr. Cook while director until 1911.

This fiftieth anniversary marks a milestone in the history of service to New Jersey agriculture. Above are shown (1) Dr. Cook, (2) Dr. Voorhees, and (3) Dr. J. G. Lipman, present director of the Station.

nuts were made in Pennsylvania this year. Many varieties of blight resistant forest chestnuts were collected in Asia and the seedlings have been planted in different states from Louisiana to New England and west to Indiana and Ohio to determine if they will survive in different regions and if they are blight resistant in North America. So far no chestnut has been tested over a long time and proclaimed immune to the blight.

FRUIT and vegetable growers in New Jersey are holding their annual summer meeting at Glassboro, Gloucester county, on August 5th. In connection with this meeting tours of the fruit districts—and vegetable districts—will be of particular interest. Several types of graders will be seen in operation, three types of stationary spray-plants will be in operation and several fruit washers will be seen. The vegetable growers will visit some of the extensive trucking areas in south Jersey.

G. B. MARSHALL and his mother and brother, Elizabeth Marshall and G. S. Marshall, of Hunterdon county, have donated some old farm implements to the Agricultural College at New Brunswick. A R. Buckwalter has also added to the collection which was started at the suggestion of another Hunterdon county farmer, H. E. Deats. Mr. Buckwalter's donation consisted of an old style hayfork, a primitive roughage grinder having a wooden cylinder with iron spikes in it, an old-fashioned wooden potato masher, two old style wooden beam plows and some "L" and "H" strap hinges. The Marshall contribution consisted of a whoa-back rake, a Deats plow No. 5, a wooden

sausage grinder and an old wooden butter print. All of these implements were collected last Thursday by Doctor Carl Woodward who is in charge of establishing the museum at the College.

H. E. Deats who suggested this collection, made the first contribution to it about a year ago. Since that time other farmers in various sections of the state have donated articles.

THE report for the forty-second week of the Hunterdon County Egg-Laying Contest indicates that Burlington county, long noted for its extensive poultry meat industry, also deserves recognition for the egg-laying ability of its fowls.

Joseph Joachim of Riverdon is the poultryman whose birds in the Hunterdon County Contest are doing much to win further honors for Burlington county. His two White Leghorn entries rank second and third among the 50 flocks, entered with scores of 1,966 and 1,935 eggs respectively.

The present leaders, White Leghorns from the Fox & Son Poultry Farm at Little Falls, have laid 2,048 eggs. Last week Mr. Joachim's birds outlaid the Fox entry 53 to 47, or an advantage of six eggs.

Several other New Jersey flocks rank high among the list of leaders and in the Rhode Island Red class they hold the first three places. In the order named they are owned by Kerr Chickeries, Frenchtown; J. C. Lambert, Trenton; and the Cane Poultry Farm, Rosemont.

REPORT of the 42nd week of the Passaic County Egg-Laying Contest. Watch for the names of poultrymen in your territory.

The Quality Poultry Farm White Leghorns, with a total of 2,170 eggs to their credit, continued to hold the runnerup position in the Passaic County Contest. First place is held by the Scott Poultry Farm Rhode Island Reds from Groton, Mass. They have laid 2,249 eggs.

The high score of the Quality Poultry Farm birds enabled them to lead the White Leghorn class in total production. Second place is held by an entry from the Fox & Son Poultry Farm of Little Falls with a score of 2,050 eggs. Another flock from the same farm, with a score of 2,080 eggs, is tied with the New York pen for third place among the Leghorns.

In the Barred Rock class the Spartan Rock Farm pen from Nutley leads with 2,086 eggs to its credit, and the birds from Kerr Chickeries at Paterson stand second. In the miscellaneous class the Jersey Black Giants from Marcy Farms at Matawan holds first and third positions.

THE report of the 42nd week of the Vineland Egg-Laying Contest follows. Entries from other states predominate on the list of these holding high honors in the Vineland Egg-Laying Contest.

Two flocks of Rhode Island Reds from Massachusetts and a flock of White Leghorns from Delaware are grouped at the head of the list, and it appears likely that one of the three will be first under the wire when the competition ends nine weeks hence.

Ranking first in total score is the Scott Poultry Farm entry from Groton, Mass., with 2,202 eggs. In the second place with 2,238 eggs is the Pinecrest Orchard entry, which also comes from Groton, Mass. R. O. Boyce's flock from Seaford, Delaware, is third with 2,217 eggs.

New Jersey's high scoring entry, a pen of Rhode Island Reds from Woodview Poultry Farm at Mount Holly, last week dropped from fourth to fifth place among the leaders in total score. This flock has a total of 2,152 eggs to its credit.

A FARMERS' Marketing Conference, sponsored by the extension service of the University of Maryland, will be held at College Park, Maryland, from August 12 to 15. At this state-wide meeting, the first of its kind to be held in Maryland, problems relative to the marketing of farm products will be discussed.

Better Protection From Rural Fires

By GEO. F. JOHNSON

ONE evening not long ago fire of undetermined origin destroyed a farmstead in the writer's community. Two fire departments in nearby towns hastened to the farm but were completely blocked in a traffic jam for a half hour within sight of the blaze. Curious motorists attracted by the glowing sky jammed all the narrow country roads for a mile or more from the fire. When one truck did force its way almost to the burning buildings, an automobile collided with it. And then to climax the futile efforts, the firemen were helpless because of lack of water. A loss of \$12,000 resulted, only part of which was covered by insurance.

Under such circumstances many farmers are utterly at the mercy of fire, having neither adequate protection nor insurance. It is probably no exaggeration to say that, taking the country as a whole, no other great industry is so unprepared for fire-fighting and at the same time suffers such a heavy loss in proportion to capital invested as agriculture.

"A thousand spectators but not one experienced fire fighter," is too often the type of gathering an unfortunate farmer attracts when a blaze threatens his buildings. Complete community disorganization in the vicinity of a fire frequently prevents experienced firemen of nearby towns and cities from reaching the disaster in time to be of any great help.

One of the greatest needs in many rural sections of Pennsylvania and other eastern states is some form of community organization designed to function instantly upon the report of a farmstead fire.

What Has Been Done

This would be a gloomy story indeed if it were not for the fact that rural communities, in some cases, entire townships and counties, here and there over the principal agricultural areas of the United States, are showing the way to simple, inexpensive and yet effective protection for the farmer equal to the protection received by urban property owners in most cities.

One of the best illustrations of a county-wide movement to reduce rural fire losses is found in Lancaster county, Pennsylvania. This county has an especially active firemen's association with 64 companies participating. The association has approximately 1,000 members and, in addition, there are over 8,500 volunteer firemen in the county.

"Many of the rural fire companies have been organized by the local people and in a very large measure are supported by local effort," states John G. Landis, president of the county association. "In some townships," he explains, "the boards of supervisors through taxes help to support the outfits, and in a few cases the apparatus has been purchased with money raised by a special tax."

The extent to which rural Lancaster county is prepared for fire can be seen by the following facts: There are at the present time 95 pieces of fire-fighting apparatus in the county outside the city of Lancaster. This equipment represents an investment of \$493,000 or almost ten times the value of the equipment in Lancaster. Of the 64 active companies, 15 have more than one piece of apparatus.

The wisdom of this adequate equipment has been well established by the results of the firemen's work during recent years. For example, the fire loss during the past year, outside the city of Lancaster, was \$467,651. At the same time exposed property saved due to prompt action by the fire companies amounted to \$166,400. In other words, property saved in one year equaled almost 95 per cent of the total cost of the equipment.

A very important factor in the effective handling of rural fires in Lancaster county is the effort made to secure an ample supply of water in farming districts. More than 50

water dams and fully as many large cisterns have been constructed and maintained for fire fighting purposes. When the water supply is some distance from a big blaze, relays are established, several engines may be used and the water pumped over a mile.

There is a perfect understanding between the companies in the county so that an efficient organization can be set up instantly at a fire. The first company chief arriving at a fire takes charge. Volunteer traffic patrols swing into action immediately, maintain clear highways, and prevent congestion in the vicinity of the blaze until state or other official patrols arrive on the scene.

A careful investigation of the causes of fires in the county during one year revealed that of 41, the cause of 19 was unknown and that the other 22 were preventable and due to carelessness. This prompted the county association to stress educational work on fire prevention. The county and city school authorities cooperated fully in the movement and during one year over 30,000 school children gave special attention to fire prevention projects. The year following this educational

drive the fire losses in the county were reduced \$180,000, according to Mr. Landis.

Other rural sections, in addition to Lancaster county, in southeastern Pennsylvania and in other states have taken progressive steps during recent years to reduce fire losses. Some very excellent illustrations have come to the writer's attention from Michigan and Illinois. One of the largest strictly rural fire protection associations in the world is located in southern Michigan. It has a membership of over 900 farmers, has been functioning since 1924 and was built up entirely by voluntary contributions ranging from \$10 to \$150 per farmer.

Out of the original contributions, a fire-truck carrying six 50-gallon chemical tanks, three 200-foot lines of hose, hand extinguishers, ladders especially designed for farm buildings, 20 buckets and other special equipment was purchased. The association is equipped to take care of any emergency that might exist in fighting a farm fire, even to the extent of having mudhooks in case the truck gets stuck in the barnyard.

One of the most important features of the association is its contract with the city fire department. The department has agreed to house and man the truck and to answer all calls. This gives the farmers 24-hour fire-fighting service and trained firemen, the same as city residents have.

The association also has the fullest cooperation of the telephone exchanges. No toll charges are made for fire calls, and test calls are gladly made every few months from different parts of the county.

A Water Supply

When a fire occurs, the farmers are instructed to bring with them milk-cans filled with water so that sufficient water will be available to recharge the chemical tanks.

At one fire there were 20 cans of water waiting when the truck arrived. The plan is regarded as a good one, since the milk-cans are easy to handle; and when the water is brought by neighbors from their wells, it is clean and can be poured into the chemical tanks without fear of getting

in dirt and other foreign matter. This plan also helps to conserve the water supply on the farm where the fire is located.

Where the farmer has been careful in giving directions, it is possible for the fire-truck to reach the farm quickly. The truck can make 60 miles an hour on good open road, and several farm calls have been made at that speed.

The inexperienced fire-fighter is a menace at a fire, so the officers of the association are continually addressing farmers' institutes and Grange meetings, telling farmers what to do and what not to do in case of fire.

"Never open a door or window to let the smoke out," is one of the ten commandments of fire-fighting in this association. Others deal with cleaning up old rubbish, storing hay and fodder, and electrical wiring.

In one year this association saved \$42,000 worth of farm property and because of its effective work was instrumental in reducing the mutual fire insurance rate in its county from \$3.10 to \$1.50.

News of the good work being done by this association soon spread throughout southern Michigan with the result that farmers in other counties formed somewhat similar organizations. In one of these counties 400 rural property owners within a radius of eight miles of the county-seat incorporated an association, purchased a fire truck capable of a speed of 60 miles per hour, two 35-gallon chemical tanks, 200 feet of chemical hose, a pump capable of throwing 500 gallons of water a minute from a river or cistern, 1,000 feet of hose, two long extension ladders, two power-

(Continued on page 16.)



A 35-acre field of Irish Cobblers on Prince Edward Island

On Prince Edward Island

By M. C. GILPIN

"YOU will like Prince Edward Island," said a lady of Halifax. "It is a million-acre farm." This description does not come far from the mark, since nearly all of the 1,250,000 acres of red sandy loam which forms the Island is under cultivation. It is the most thickly settled and highly-developed province in Canada. The population is largely rural, four-fifths of the people living on farms. The farmers raise the city folks' taxes, lower their own and run things in general. It was a comfort to many farm editors to find a place where farmers have the upper hand in politics.

Poverty and extreme wealth are absent. A happy medium prevails where everybody seems comfortably supplied with worldly goods and unusually well content with his lot. And why not? The soil is rich, the climate friendly, the scenery inspiring and the roads admirable.

The latter phrase requires explanation. There is no stone on the Island. All material for hard-surfacing roads would have to be brought in by ship at big expense. So the canny Islander endures the dust rather than assume debts hard to pay. No automobiles were allowed on the Island up to 1912 and then they could travel only certain roads and on certain days of the week until 1919 when all restrictions were removed. Horses are still the chief means of transportation. Here for the first time in a score of years we met a horse that was afraid

of automobiles, and with some reason. For the cloud of dust which trailed our caravan would frighten a more sophisticated brute.

A sort of checker-board effect is given the countryside by rows of spruce which outline the fields. The red tint of the soil, contrasting with the dark green of the evergreens and spotted with silvery streaks of lake or sea in the distance makes a perfect setting for the neat farm homes.

Nearly every farmer keeps foxes, for here is where the fur-farming industry started. The business is evidently profitable; at any rate it is going strong after several years' test. Numbers of foxes kept range from a half dozen or so on general farms to 50 to 1,000 on regular fox ranches. There are around 4,000 fox farms on the Island and the annual production is valued at over \$4,000,000. Breeding animals are worth around \$500 a pair, while the pelts have a wide range of value according to grade. It is desired to get a medium colored pelt, not too light nor too dark. This is accomplished as with Plymouth Rock show birds by mating a light female with a dark male.

Foxes are paired and kept in specially-built wood kennels or pens, which consist of a pen within a pen, for the fox never gets very tame and likes lots of privacy. Even then foxes dig burrows in their lots, which are enclosed with woven wire reaching two or three feet into the ground.

The Skokums of the Allegash

By Holman F. Day

Copyright, 1907, by Perry Mason Company, Boston, Mass.

where near by. He went up into the woods, where the sound was dulled a bit; but the woods were damp and lonesome, with wreaths of dirty snow in the little valleys. So he came back to the noisy companionship of the river.

At least that had come from somewhere and was going somewhere—was going down to the country of the St. John, past the big, swelling hills and the narrow farms he had heard his people tell about. And when he looked down through the vaporous throat of the Jaws, and thought of the others going on gaily, seeing new vistas and sharing the rough jollity of the camp, a longing that was almost frenzy seized him and urged him to leap into the flood and follow. The whole thing seemed now to him like a deliberate plot on the part of the crew to single him out for persecution; and in his rage and helplessness he sat down on the rocks and wept like a child.

But if there is any one thing that can overcome the passions it is hunger, and as the shadow of his cant-dog, standing stiffly in the soil, grew

The Cheerful Plowman



I GUESS IT'S DUE THEM!

SOMETIMES I tear my whiskers when a dunning letter comes. I rave like ninety ganders and I twirl my throbbing thumbs. "Oh, the grocer, drat his picture, what's he wanting now, the scamp? He will pocket all my earnings and he'll turn me loose, a tramp."

"And look, here is another from the druggist! Mark my words, I will soon be eating berries in the forest with the birds. And the plumber? What the Harry? All he did was drain a pipe. He's another highway robber, he's a grafter and a snipe. "And the man who patches wagons? And the man who hammers plows? And the man who tunes up motors? And the man who doctors cows? Twenty-seven, think about it! Twenty-seven looting gents who are after all my dollars and my little pile of cents."

"I've a notion not to pay them, not to pay a single one. Have they ever done a service? Will you tell what they've done? I am raising pigs and barley for the hungry folks to eat, and I'm turning out fat turkeys and a splendid lot of wheat! I'm producing for the hungry. I am doing something fine on this little farm. I tell you, at this little job of mine! But those rascals, they are grabbing at the dollars here and there and the world could starve for biscuits and they wouldn't really care."

Thus I rave and thus I sputter when the bills flood in on me, but I know a darn sight better, as the angels will agree. For, how could I raise barley if the blacksmith wasn't there to bolster up my wagon and to hammer out my share? And how could I raise chickens if the plumber didn't come to make the drain pipes steady and to get them into plumb?

If the druggist didn't handle just the powders I should have, and the proper kind of balsam and the proper kind of salve, but what's the use of talking, they are needed every one, so I'll pay them every dollar and I'll think of it as fun. J. E. T.

short, his appetite grew strong. His hunger drew him back to the seat of his government at an opportune time, because the offended squirrel had collected several of his friends, and the mob had already broken into the stores, and were busily engaged in carrying away such edibles as they could handle.

Therefore Shain devoted the rest of a busy day to municipal improvements, which included a rock cache for his provisions, new stones for the lining of the bean-hole, and a thatching of the sides of the lean-to. Already the place looked more homelike, and when he had kindled his little fire at dusk and sat before it, there was a certain coziness about it all that cheered him.

He reflected that on the drive it was, after all, steady lift and tug, wet foot and slosh-away from sun to sun; and then he rolled himself in his blankets with the thought that for a marooned man even this amount of consolation was very comforting.

The new mayor of Toban Jaws blinked his eyes once or twice at the winking stars and went to sleep.

When Shain stirred, stretched and awoke the next morning, the river was singing its hoarse song, and somehow it sounded vastly more cheerful than it had done the day before. The May sun, just above the rocky ridge in the east, quivered in his eyes as he opened them. The warm light danced in flakes over the pine-needle carpet as the wind shook the branches of the big trees. A thrush and a jay-bird were trying out their voices, and his argumentative friend of the preceding day, the squirrel, was sitting on the rock cache, eyeing him reproachfully and nursing sore paws. Decidedly it was more cheery at Toban than he had imagined.

So he frizzled his bacon and ate his hard bread, and even meditated with ardor on a pan of hot biscuits for supper.

A half-hour later Shain discovered that a sulky old hemlock had lodged during the night on the ledge, had gathered to itself numerous lazy malcontents of the log family, and was rapidly establishing a colony.

It was the labor of a busy forenoon to wade out in the shoals and tumble the sulkers over into the channel. And in the afternoon various municipal improvements suggested themselves to the new mayor, and then evening came, and with it sound slumber, that even scouting porcupines, scuffling in the underbrush, and a squalling owl could not break.

Thus one day followed another for many weeks, flooded with sunshine or washed with rain, but all very peaceful, and each one bringing deeper content to the Toban administration.

Once in a while, to be sure, the mayor envied the logs that were bound down into the flashing waters of the far St. John. Soon these, he reflected, would sail gaily past wooded islands and skirt delectable shores, where the Acadian farmhouses stood shaded under their maples and elms, while he must stay in the solitude.

BUT the insensible logs, at least, could not talk or incite or coax, and therefore the Toban regime would have remained comfortable and measurably content had it not been for distractions that the mayor had not counted on.

As soon as the high water dropped and the weather grew warmer, he realized that he had been posted beside a wonderful thoroughfare.

First came the lumber prospectors from down-river, making the carry about the Jaws and poling away up-stream, bound into the woods to locate the next season's cuttings. Sometimes these men stopped and camped with the mayor, and all humorously gave him his title, for the establishment of the mock administration had been for many years the river jest.

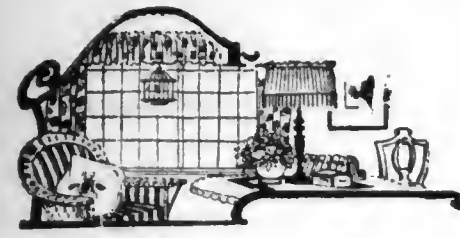
But in the latter part of June all his visitors came from the other way, came spinning down the swift water in canoes, bow and stern paddles flashing, and merry shouts hailing him. These voyagers were city people, making the "big swing," already browned and hardy after many days of roughing it. And it was well for the mayor of Toban Jaws that his temper was even and his nature serene, for every guide and every sportsman had fresh quip and satire. There were merry brown women, too, before whose sallies his eyes fell and his tongue stammered.

They all went on, the guides carrying the canoes down the winding wood-road, the craft up-turned over the head and shoulders, and the whole resembling a parade of huge, queer, hard-shelled snails.

As on and on this procession streamed to the unknown and desirable north, unrest stirred again in Shain's breast. During the many days when no one came he was hungry for companionship, even that of the careless jesters who had made him butt and gone on, forgetting him.

One evening, as he sat in the lee of his "smudge pile," where the eddying smoke drove away the thronging insects, a canoe slid softly down the shore, and when its prow grated on the shingle at the carry landing-place, the bow paddler stood up to step out.

(To be continued.)



The Farm Home



Why Let Them Strut?

By MARCELLE LAVAL

IN the late summer or early fall, when the flocks are culled for non-egg-laying hens and surplus roosters, the wise homemaker will get out her canning equipment and can many glass jars of tin cans of chickens. Prices are lowest at this season and it stands to reason that this is the best time of the year to can chickens.

Chicken canning is economical and so often a real blessing to the homemaker. When unexpected guests arrive for dinner, she can select a jar of fried, roasted or stewed chicken, and prepare a delicious meal with a minimum of time and trouble. If she comes home late from a community meeting or a shopping trip, there's a jar of chicken all ready to be heated and set before the hungry family.

For canning purposes, the birds should not be fed for at least 24 hours before killing. Kill at least six hours before canning, as it takes that long for the animal heat to leave the body. Remove feathers, pin feathers and singe. Cleanse the surface of the chicken thoroughly by rubbing it with soda or bran. Then cool the chicken rapidly. This rapid cooling after killing is essential to a good flavor in canned chicken.

In preparing the bird for canning, care should be taken in drawing it so that the contents of the digestive tract do not come in contact with the meat. If the following steps are followed, the chicken will be cut just right for canning:

How to Prepare for Canning

Remove the tips of the wings, cutting at the first joint.

Remove the feet.

Remove the foot cutting at the knee joint.

Remove the leg cutting at the hip or saddle joint. Cut the removed portion of the leg into two parts at the joint.

Place the bird so the back of the head is toward the operator, cut through the neck bone with a sharp knife but do not cut the windpipe or gullet. With the index finger separate the gullet and windpipe from the skin of the neck.

Cut through the skin of the neck. With a pointed knife cut through the skin from the upper part of the neck thus separated to the wing opening made by removing the wing.

Leave the head attached to the gullet and windpipe and loosen these from the neck down as far as the ribs.

With a sharp pointed knife cut around the shoulder blade, pull it out of position and break it. Find the white spots on the ribs and cut through the ribs on these white spots.

Cut back to the vent; cut around it, and loosen. Begin at the crop and remove the digestive tract from the bird pulling it back toward the vent.

Remove the lungs and kidneys with the point of a knife.

Cut off the neck close to the body. Cut through the backbone at the joint or just above the diaphragm.

Remove the oil sac. Separate the breast from the backbone by cutting through on the white spots.

Cut the gullet from each side of the breast bone. Cut the sharp at the point of the breast bone, turning the knife and cutting away the wishbone with the meat. Bend in the bones of the breast bone.

The chicken is then ready to be canned. It may be fried, roasted, stewed, or fixed in any way that chicken is served. Fix the canned chicken as you wish to serve it.

The younger birds may be fried in the usual way until the pieces are thoroughly browned. The older birds may be boned by splitting the flesh down the back and removing it from the skeleton, using a sharp knife.

A very nice way is to prepare the chicken as for broiling and then to steam it in a pressure cooker until the meat can be removed from the bones. The cooked meat is then packed in glass jars or tin cans to be processed.

Equipment Needed

A steam pressure cooker is recommended for the canning of chicken as this method assures safe canning with sure keeping qualities. The high pressure obtainable in the pressure cooker prevents spoilage, as all bacteria and spores are quickly destroyed during the canning process. The U. S. Department of Agriculture recommends the

pressure cooking method for canning all meats as the one safe sure method. Chickens are an expensive food, so it behooves us to follow the advice of the government when it comes to canning them as well as all other meats.

Glass jars or tin cans may be used. Tin cans lend themselves admirably to the packing of the chicken. A tin can sealer quickly and easily seals the cans after the chicken is placed in them.

A steam pressure cooker, tin cans and sealer can all be a part of the equipment of every farm kitchen for canning. The cooker is also used in the preparation of regular meals for the saving of time and fuel.



Canning chicken is very easily done with a pressure cooker. The chicken may be fried, roasted or stewed before being packed in the hot jars.

Packing the Chicken

After the chicken has been prepared, as desired, it should be packed hot into hot jars or tin cans.

It is a good plan in packing a number of chickens to make two distinct packs. Place in one the selected parts such as the drumsticks, thighs, wings, etc. This may be called the "company" jar. The less desirable parts, wing tips, neck and other bony pieces, although they are just as nutritious and tasty, can be put into a "family" jar, to be used for soup or stews.

To pack the "company" or "show" jar, first put in the thigh, then a drumstick, then the two wings fitting one into the other. Unless some sort of support is placed in the center of the jar at this stage the pieces will begin to fall one upon the other. The chicken feet, if they have been properly prepared and scalded, will serve fairly well in this capacity. Chicken feet contain a large proportion of gelatin and should not be disregarded. If the feet are not used, the neck, with the upper portion of the back attached, answers very well as a support. Place the rib-end down so that the ribs will act as a center support to all the surrounding pieces. The neck can be used as a handle, as it comes well toward the top of the jar, and is useful for removing the first piece of chicken when the jar is opened for serving.

Next insert the back, placing it in a jar so that it entirely conceals the neck portion. Use the back as a foundation for the two large pieces of white meat or fillet. Spread these out over the back so that they cover as much surface as possible. This white meat when cooked adds greatly to the appearance of the jar. Pack the remaining leg, thigh and wishbone. Add two level teaspoons of salt to each quart. Do not add any water. Place in glass jars, on which rubber rings have been placed. Completely seal tin cans.

Sterilize pint jars for one hour at 15 pounds pressure; quart jars 70 minutes at 15 pounds pressure. Let pressure run down to zero; slowly release steam through petcock. Remove cover of cooker slowly. Remove jars and completely seal.

If tin cans have been used, the steam can be immediately released slowly through the petcock and the tin cans placed in cold water to stop further cooking.

The following recipes may be helpful:

Fried Chicken

Fry pieces of chicken in fat as for the table. Add no flour. When chicken is brown, but not done, pack in jars and add gravy from pan. Add salt. Process.

Fricassee Chicken

Prepare according to your favorite recipe. Cook until well browned. Place in the jars with or without bones. Add salt. Process.

Roast Fowl

Melt some butter or drippings in roasting pan, place the chicken in it and brown in the oven. Add a little hot water and baste the fowl frequently. Cook until fairly tender. Remove from oven and cut into pieces which will fit into the jar, or cut the meat from the bones and place into the jar. Pour the gravy (use no flour) over the chicken. Add salt. Process.

Stewed Chicken

Cook chicken in water to cover until meat is well loosened from the bone. Remove bones, keeping the pieces of meat as large as possible. Pack hot in hot jars or tin cans; add salt and fill with boiling broth in which the chicken was cooked. Process.

All of these different kinds of chicken can be prepared for canning in the pressure cooker, thus saving considerable time. Stewing chickens sufficiently cooked for canning will require only 20 minutes in the pressure cooker, while it takes one hour in any other kettle. After the chicken has been cooked, the cooker can then be turned into a canner.

Game of Passing Pennies

A DOZEN little girls at a birthday party were shut in the house by falling rain and the afternoon was almost a failure until Aunt Jennie came in and taught them some new games. Passing pennies was one of the best liked and this is the way they did it.

The players were divided in two lines, six in each line. There could have been longer lines had there been more players.

At the top and the bottom of the rows small tables were placed and on the one at the top two little heaps of pennies, six for each side.

At a signal child number one of each row takes a penny from the table with his left hand, passes it to his right and drops it with that hand into the left hand of child number two, who passes it from left to right and then on to child number three. Meanwhile as soon as the first penny was passed to child number two, child number one takes another from the table and starts it down the line.

Each line tries to see which can first pass all the pennies from its pile on the upper table to a pile being made on the lower table.

No player must have more than one penny in his hands at a time and if one is dropped it must be recovered before more can be passed.

Lining the garbage pail with paper and wrapping up garbage each time it is put in helps to prevent flies.



Must Think About School Clothes

No. 6927.—Cut in 5 sizes: 6, 8, 10, 12 and 14 years. A 10-year size with the cape requires 4 yards of 39-inch material. Price 15c or two for 25c.

No. 6910.—Ladies' coat. Cut in five sizes: 24, 26, 28, 30 and 32 inches bust measure. A 26-inch size requires 4½ yards of 39-inch material. To line the coat requires 4 yards of 36-inch wide material. Price 15c or two for 25c.

No. 6902.—Cut in three sizes: 16, 18 and 20 years. The dress with the cape for an 18-year size requires 4½ yards of 39-inch material. Without the cape 3½ yards will be required. Price 15c or two for 25c.

No. 6913.—Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires 4½ yards of 39-inch material. For 20-year size material ½ yard is required. Price 15c or two for 25c.

No. 6911.—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. An 8-year size requires 4½ yards of one material 36 inches wide. Price 15c or two for 25c.

No. 6915.—Ladies' dress. Cut in five sizes: 24, 26, 28, 30 and 32 inches bust measure. A 30-inch size requires 4½ yards of 39-inch material. For contrasting material ½ yard 39 inches wide cut crosswise is required. Price 15c or two for 25c.

No. 6557.—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. A 12-year size with long sleeves requires 3½ yards of material 36 inches wide. Price 15c or two for 25c.

No. 6923.—Ladies' apron. Cut in one size. medium. It requires 1½ yards of 36-inch material. To finish with bias binding requires 7 yards 1½ inches wide. Price 15c or two for 25c.

No. 6932.—Girls' bloomer dress. Cut in four sizes: 2, 4, 6 and 8 years. A 4-year size with short sleeves will require 2½ yards of 36-inch material. Price 15c or two for 25c.

No. 6938.—Girls' dress. Cut in four sizes: 6 mos., 1, 2 and 3 years. A 2-year size requires 1½ yards of 32-inch material. The yoke and skirt facings of contrasting material require ½ yard 32 inches wide cut crosswise. Price 15c or two for 25c.

No. 6545.—Ladies' morning frock. Cut in four sizes: Small, 31-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. Price 15c or two for 25c.

HOW TO ORDER

Write your name and address clearly. State number and size of each pattern. Price 15c each, two for 25c. Send stamps or coin. Our Fashion Magazine will help in preparing your wardrobe. Copy only 10c. Address Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

TWO HELPERS INSTEAD OF ONE IN EVERY BAR

That's why

FELS-NAPTHA IS FINE FOR SOAKING OR BOILING CLOTHES

FELS-NAPTHA is one soap that is always willing to work—your way. Boil your clothes if you like. Soak them if you wish. But use Fels-Naptha and you'll get a wash that will delight you—quicker and easier than you ever expected.

The reason is simple enough—Fels-Naptha brings you two active cleaners in every bar. Not "just soap," but unusually good golden soap and plenty of naphtha. Working hand-in-hand, this sturdy pair bring you extra help. Together, they loosen the most stubborn dirt and wash it away without hard rubbing—in water of any temperature.

Next washday, remember—the bargain that counts is the one that saves you. What you want is more help, not more bars. And Fels-Naptha gives you extra help. Try it in tub or machine.

Try it for easier household cleaning—for windows and woodwork, for milk cans, strainers, incubator trays. Your hands will find it gentle. For Fels-Naptha works so quickly that you don't have them in soapy water so long.

Get Fels-Naptha at your grocer's. The ten-bar carton is specially convenient!

SPECIAL OFFER—We'll be glad to send every user of Fels-Naptha Soap a Fels-Naptha Chipper. Many women who chip Fels-Naptha into their washing machines, tubs or basins find this chipper handier than a knife. Use it and Fels-Naptha to make fresh, golden soap chips (that contain plenty of naphtha!) just as you need them. Send only a two-cent stamp to help cover postage, and we'll mail you this chipper without further cost. Write today. Dept. 7-8-2, Fels & Company, Philadelphia, Pa.

THE GOLDEN BAR WITH THE CLEAN NAPTHA ODOR

FELS-NAPTHA

FREE 54^{PC} DINNER SET

10 Pc. Full Size Silver Aluminum Set including: Large Preserving Kettle, Mixing Bowl, Sauce Pan, Pudding Pan, Pie Pan, Cake Pan, Dipper, Graduated Measuring Cup, Salt and Pepper Shakers, given FREE besides Dinner Set for promptness. Satisfaction Guaranteed.

Sell Only 10 Lbs. Coffee

and with every pound give to each purchaser all of the following high grade pure food products: pound Baking Powder, large bottle Vanilla, box Corn Starch, pound Cane Sugar, box Baking Soda, box of Cocoa, box Dessert Jelly, box Pepper and Jar Prepared Mustard (see our plan 1222) and this full size, handsomely decorated Horn of Plenty Dinner Set is yours. Absolutely Free. Hundreds of other Premiums such as Furniture, Rugs, Kitchen Sets, Wearing Apparel, etc., or Big Cash Commission. You can also sell Household Supplies, Toilet Articles, Jewelry, etc.

SEND NO MONEY
WE TRUST YOU
WE PAY THE FREIGHT

You have nothing to risk. Our Iron-Clad guarantee insures Absolute Satisfaction and a Square Deal. During our 33 years in business we have established an honest and dependable reputation, and are known as the World's Greatest Premium House, and Full Information.

THE PERRY & MASON CO.,
Dept. 539 Cincinnati, Ohio.

How Rashes Do Itch!

Bothe freely with

CUTICURA SOAP

Acne with

CUTICURA OINTMENT

RELIEF AND HEALING FOLLOW

Price 25c. each. Sample free. Address: "Cuticura," Dept. 93, Malden, Mass.

Bulb Book-free

It tells you of the flowers that will bloom this winter in the house, and those that, planted now, will give you a beautiful garden next spring. Write for a copy of this free bulb book.

W. ATLEE BURPEE CO.
874 Burpee Bldg., Phila., Pa.

Read the Advertisements

they keep you to the fore of modern life. Through advertisements you've laid down the shovel and the hoe. You can buy a whole harvest ready-to-eat in cans. You've hung up the fiddle and the bow, for a radio. There's little old-time work left in this age of amazing short-cuts. Read the advertisements carefully and when answering them, say you saw their ad in Pennsylvania Farmer.

THE YOUNG PEOPLE

Gay Feathers Make Gay Birds

A SUMMER porch or a wide light window where cheery sunbeams flit, where blossoms and greenery of cool moist plants and ferns effect a tropical atmosphere, provides just the right background for a very resplendent parrot like the one in the illustration. Here he can perch and swing picturesquely in quaint and colorful charm.

Fibre parrot forms come perching on a lot of self-material. The form is slightly reconstructed, according to the following directions:

Step 1: With a sharp knife blade or scissors cut away the log and feet of the parrot. The cutting lines are indicated on the form by dotted lines.

Step 2: Cut out wings along dotted lines. Retain these wing cut-outs for foundations of wings to be reattached later. The head, tail, breast and a very narrow back now remain.

Step 3: Through the opening made by cutting out the wings, stuff the body of the bird with pieces of crepe paper stretched and crushed. Wrap smoothly with two-inch wide strips of crepe paper the body to hold stuffing securely and to keep the body smooth. Paste down the ends of the strips.

Step 4: Reinforce the wing foundations with heavy weight wires doubled to form a loop half as long as the length of the wing. Cut these wires sufficiently long to permit the two ends extending beyond the base of the wings about four inches, to be fastened to the back of the bird. Fasten the loops to the wings with little tabs of gummed cloth tape.

Step 5: Bend the extending ends of wing wires to shape, arrange in right position to back of body and fasten securely with tabs of the gummed tape.

Step 6: Now feet must be provided. Cover pieces of heavy wire with tan colored crepe paper cut in inch-wide strips and crushed. Bend in hairpin shape for claws then re-bend each in the center to a slight angle. Wrap two hairpins together to form one foot of four claws, leaving the ends of the wires at top unwrapped. Punch holes in proper position in the stuffed body; apply glue to the unwrapped ends of the claw wires and insert these ends into the holes. To strengthen and hold them securely in place, fasten with gummed cloth tape.

Step 7: With two-inch strips of paper, cut across the grain, and stretched, wrap the body smoothly, bringing the strips from the back over the shoulders, across the breast, under the wings and over again onto the back.

The parrot is now ready for the application of feathers, beak covering and eyes.

Cutting and Applying Feathers

The feathers vary in size. The tail feathers are strips of paper about two inches wide and of graduated lengths, ranging from four to twelve inches long, trimmed to points at the



lower ends. They are cut with the grain of the paper and made of double thickness, pasting the two thicknesses together. This keeps them in realistic shape.

Arrange and paste the tail feathers in place onto the foundation, beginning at the end of the foundation and working upward. Cover the joining or tops of tail feathers with feathers cut two inches wide and three and one-half inches long, pasting them in overlapping rows working, as before, from the base upward.

Cut and paste together wing feathers the same as described for the tail, except in lengths ranging from three to eight inches; arrange and paste in place on the wing foundations.

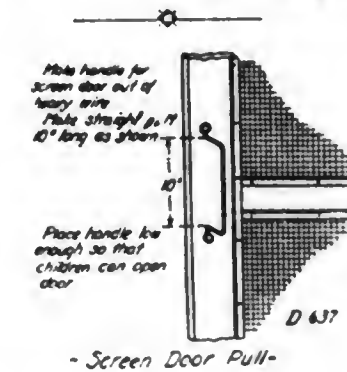
The bird's body and the tops of wings are covered with feathers cut two inches wide and three inches long, trimmed to points at the lower ends. These are pasted in place in neat overlapping rows onto the foundation, beginning at the back of the body and working towards the neck.

As the neck is approached, use feathers one and one-half inches long and about three-quarters of an inch wide and paste in place in the same overlapping arrangement, and working upward and toward the top of the head and beak.

Cover the beak with gray crepe paper, pasting it in place, or with hot gray sealing wax, smoothed on with pallet knife. The eyes are little circles of ivory sealing wax dropped on hot, a smaller circle of gray wax on top of this and lastly a speck of black wax.

Color Suggestions

The parrot with spreading wings was gorgeous with tail and wing feathers of national blue and French blue blended; breast gold bronze, back and shoulders light amber, neck grass green, head jade green, beak and eyes as described in the foregoing.



Screen Door Pull

HERE is a very handy addition to any screen door. Make it longer and larger than the regular pulls. Use heavy wire (D-637) and make it about ten inches long between hands. Screw to door with upper end about as high as regular door knob, then small children can reach it as well as adults.

This is much easier to get hold of in the dark or when one comes to the house with both hands full, as with an armful of wood, milk pails, clothes basket, or other bulky articles.

I. W. D.

How Fritzie Helped

A CITY lad of eleven years, was no taller than his playmates of seven, and so when the quota of "Fresh Air" children was made up he was allowed to accompany his younger playmates. When he reached the village where they were to be entertained Fate again played godmother and instead of being "entertained" by the grocer's family as had been planned he was sent into a real country home, miles from a state road and out of sound of radio or railway.

As the farm horses jogged along, their driver explained that he was sorry the grocer's son had measles but he'd do the best he could to fill in. He'd never been able to buy his children playthings like some had and he was afraid the two weeks would be pretty dull ones for a boy used to everything.

Fritzie gave scant heed to what was said, he was too busy seeing what was going on about him: a brook babbling on over white stones; he had read about them in books, but no one had described them as lovely as the little one beside the road; a bird that from the description in his bird book must be a crow. A creature darted across the road, long ears, long legs, a rabbit from its resemblance to the ones he had seen hanging in shop windows.

But this is not to tell you what the country gave Fritzie but what Fritzie gave Bob and Fred and Elizabeth in the country.

First he found a stout board and showed them how to nail two stout strips of wood on either side of a log, put the board between them, the middle of it over the log, and have a see-saw quite superior to any bought one.

After borrowing the hay rope he made a swing, with a board seat, the elm tree furnishing not only the limb to which it was tied, but shade for the greater part of the day.

In the woods back of the house he supervised the cutting of limbs and brush and following the plans of his Scout handbook showed the children how to make a lean-to shack that was their pride and joy long after he had gone back to his tenement home.

The greatest triumph of all was

Little Folks' Corner

The Circus We Saw

THE circus I went to this year was very interesting. There were three rings going all the time.

One trapeze performer hung by her knees from the trapeze. The most dangerous part of her performance was to hang by her ankles. It was very exciting and dangerous. It was so dangerous that they had a life net under her.

Another interesting feat was when a girl held on by her mouth, and swung back and forth like a butterfly, high in the air.

In the ring farthest from where I sat, a woman took a very high pole, and balanced it on her forehead. Afterwards she balanced it on her shoulder while a man climbed up it, and stayed up a long time. She must have been very strong to do it.

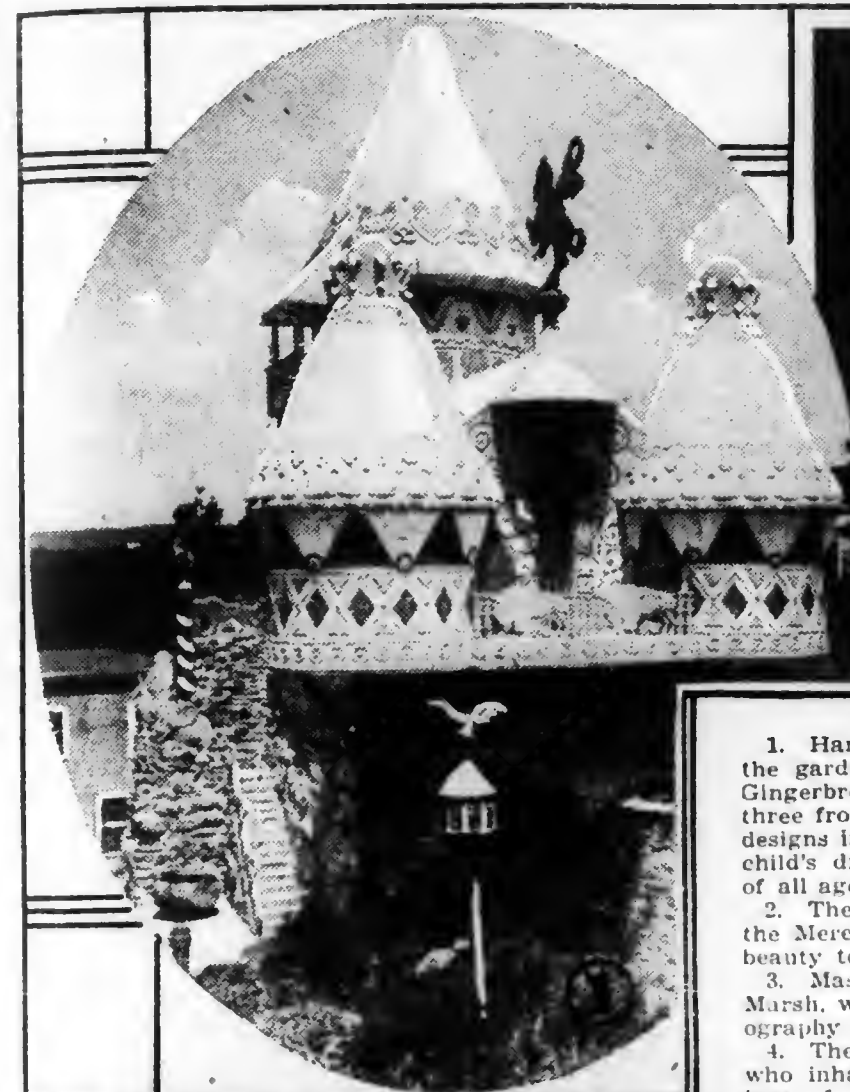
A man came out once and turned fifty somersaults in the air, one after another. After that, he turned one in the air on a wire. He also turned a backward somersault in the air on a wire.

There were goats that seesawed. There was one on each end and one in the middle would walk back and forth and so make the board go up and down. I think it was very cute.



Drawn by Barbara Shoemaker

PASSING EVENTS IN PICTURES

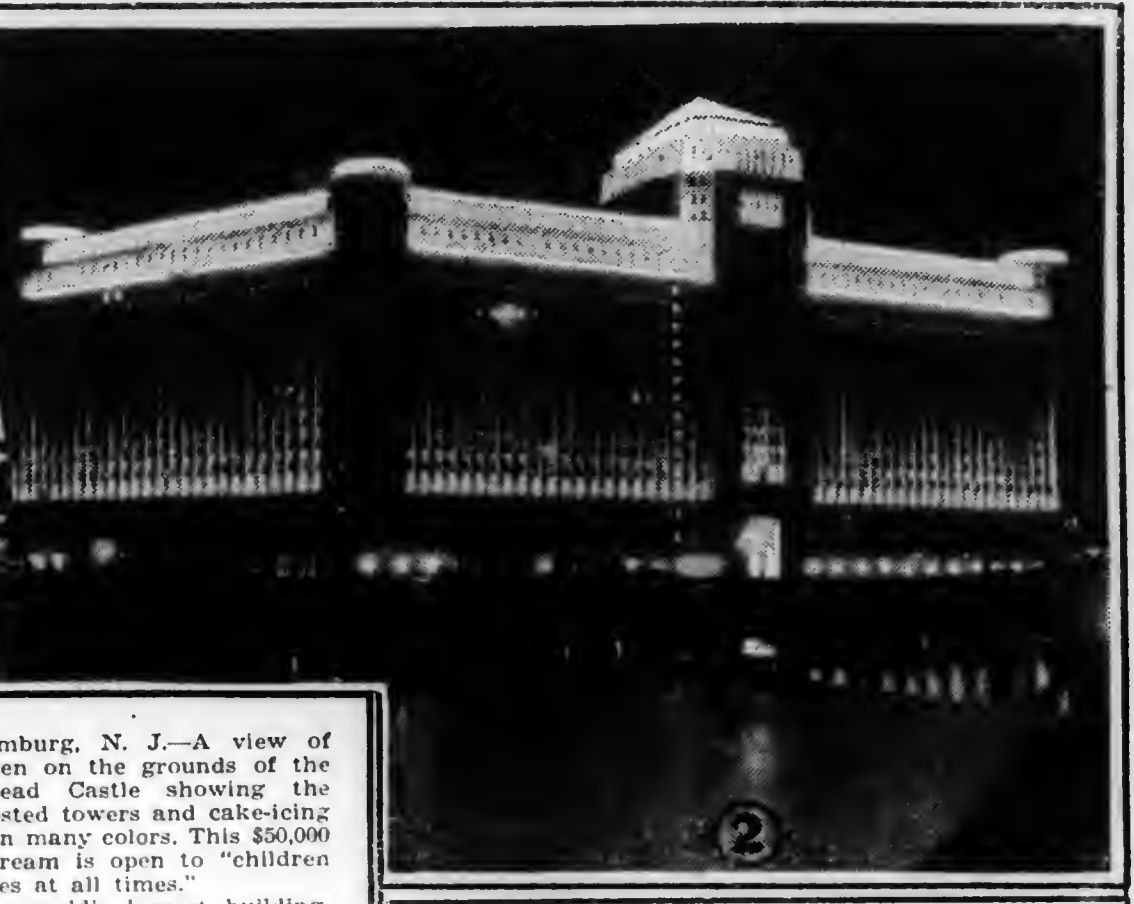


1. Hamburg, N. J.—A view of the garden on the grounds of the Gingerbread Castle showing the three frosted towers and cake-eating designs in many colors. This \$50,000 child's dream is open to "children of all ages at all times."

2. The world's largest building, the Merchandise Mart, is an added beauty to Chicago's night views.

3. Masters William and Charles Marsh, who recently compiled a biography of President Hoover.

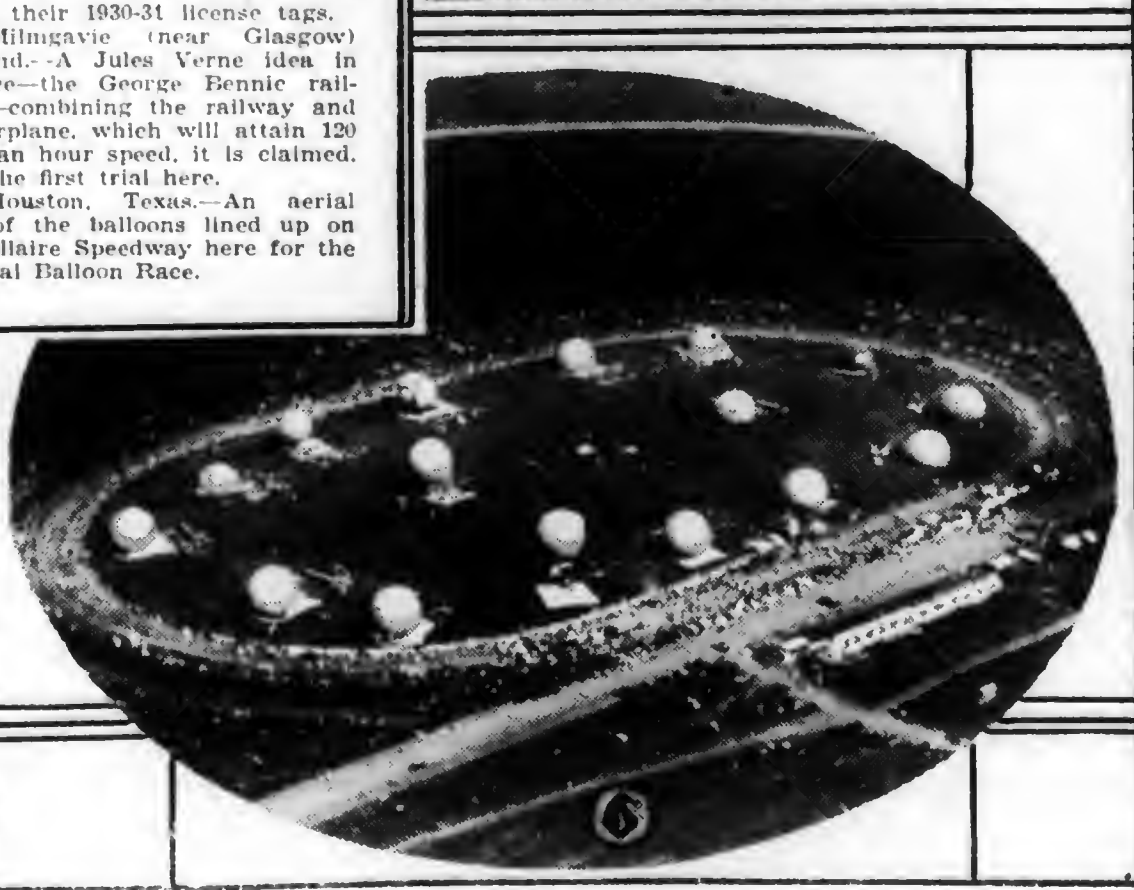
4. The first dogs of the nation, who inhabit the elegant surroundings of the South Grounds of the



White House at Washington, received their 1930-31 license tags.

5. Milngavie (near Glasgow) Scotland.—A Jules Verne idea in practice—the George Bennie rail-plane—combining the railway and the airplane, which will attain 120 miles an hour speed, it is claimed, after the first trial here.

6. Houston, Texas.—An aerial view of the balloons lined up on the Bellair Speedway here for the National Balloon Race.



USE THIS COUPON TO ORDER INTERESTING BOOKS

Please send me the books postpaid that I have checked below. I enclose the proper amount to cover all.

"Sealing Wax Crafts," including Decorative Parrot made with sealing wax 10c
 "How to Make Table Decorations and Favors" 10c
 "Money Making Bazaars" 10c

Name

Address

R.F.D.

State

Mail all orders to Party Editor, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

23,132 farmers tell how to

Make Money on Winter Wheat

THESE men, living in 395 different winter wheat counties, have found a way to beat low wheat prices. "Fertilize," they say. And they speak with authority. For they get back \$2.81 more in crops from every dollar invested in fertilizer. They used plenty of fertilizer—do you?

The way to profit on wheat next year is through the more liberal use of fertilizer... a high-quality fertilizer that drills perfectly to the last ounce... Armour's Big Crop High Analysis Fertilizer.

Use Big Crop to give wheat a good start before frost and to help it stand the winter. Use Big Crop to help wheat stool out in the spring, grow sturdy straw, and develop long, full heads by the time harvest season comes around. And use Armour's Big Crop Fertilizer to fill those heads with plump high-quality grain

... grain that will grade high and bring top price. A local dealer will help you estimate the amount of Big Crop Fertilizer you will need this fall.



Armour Fertilizer Works Chicago, U.S.A.

We Can Save You Money

Send for particulars about Compensation and Automobile Insurance. We protect the employer, 24 hours in the day in this Company. **PENNA. THRESHERMEN and FARMERS' MUTUAL CASUALTY INSURANCE COMPANY** Harrisburg, Penna. 311 Mechanics Trust Building



Use the sprinkling can FREELY

Destroys disease germs—keeps down foul odors

DR. HESS Dip and Disinfectant quickly establishes health conditions and helps to prevent contagious diseases.

Dip, spray or sprinkle and give every animal a chance to be at its best and to do its best.

This standardized preparation has five times the strength of carbolic acid. Always uniform in strength. It makes the finest, milk-white emulsion of any dip you can buy at any price.

Dr. Hess Dip and Disinfectant kills hog lice, sheep ticks, scab.

Kills poultry lice and mites. Destroys disease germs and makes dairy barns sanitary and clean smelling.

Dr. Hess Dip and Disinfectant costs less than ordinary dips because it goes farther.

Excellent household disinfectant.

Guaranteed

Dr. Hess & Clark, Inc. Ashland, Ohio

DR. HESS DIP AND DISINFECTANT

Better Protection from Fires

(Continued from page 8.)

erful electrical search-lights as well as other necessary equipment.

Arrangements between the city fire department and the rural association very similar to those already described for the first association were made so that 24-hour, experienced, fire-fighting service was assured. Some idea of the success of this cooperative effort can be secured by the following report: During a period of five months, five runs for members and two runs for non-members were made. In one case a \$4,500 home was saved after a threshing outfit had set the barn afire. Only the speed of the fire apparatus—four miles in six minutes—and a nearby pond saved the house.

In none of the cases reported was more than eleven minutes required to make the runs to farm fires. The longest was an eight-mile run made in eleven minutes, and in this instance, property saved was estimated at \$1,500 with but \$500 loss.

It is estimated that the fire apparatus during the first five months in operation saved farm property valued at \$13,450, three times what the outfit cost. It is said that the local insurance company has saved between \$13,000 and \$14,000 a year because of this organized effort. For that reason, the company pays \$10 to the association every time a run is made to a farm fire.

In still another Michigan community, 220 farmers formed an association and each paid \$25 to buy the necessary equipment. In one year this association made runs to nine fires at which \$34,300 worth of property was in danger. The total loss from the fires was only \$7,762, the association having saved the farmers property worth over \$26,000.

Putting together the three associations just described, it is found that they represent a total investment of \$20,000 and yet this equipment, plus quick community action, was largely responsible for saving

approximately \$75,000 worth of property in a single year.

A splendid example of town and country cooperation for fire protection is found in an Illinois community. Here the townspeople and the farmers within a radius of five miles from the town pooled contributions amounting to \$10,000 and purchased modern fire-fighting equipment. One of the unique features of this association is the system employed to give farmers effective service. A file is maintained in the fire station in which is kept a map of the farm of each rural subscriber. This map shows the location of buildings and the sources of all available water. Thus, when John Jones sends in an alarm that his barn is on fire, the fire department captain grabs all the maps in the J pigeonhole and has time to study the location of Jones' water supply before the farm is reached, whereas if no map were available, the captain would have to wait until the farm was reached before making detailed plans for fighting the fire. During the period of two years this apparatus answered calls to 36 farms and while not all of these fires were extinguished without extensive damage, the firemen were able in every case to confine it to the original building.

Undoubtedly, there are many other excellent illustrations throughout the country of successful community organizations designed to function promptly in time of fire. The successful efforts of those few which have come to the writer's attention make it appear safe to venture the following assertion: If every rural community in Pennsylvania and in other eastern states were as well prepared to instruct farmers in fire prevention and to assist farmers in fighting farmstead fires as those described here, damage to rural property would be reduced millions of dollars and an entirely different level of insurance rates would be in order.

On Prince Edward Island

(Continued from page 8.)

They are fed a commercial feed and given worm capsules regularly to rid them of internal parasites. A breed association registers the animals, but only after a careful official inspection. To be registered a fox must not only be pure-bred but must come up to a certain standard individually. There are no registered "scrub" foxes, a most commendable scheme for breed improvement. Those not good enough for registry are painlessly killed by injection of strychnine with hypodermic and their pelts marketed for fur. So important has this business become that a fox experiment station is provided to gather information about these animals.

The soil and the climate are favorable for potato production. Apparently no one knows just why potatoes here and in some parts of New Brunswick are so free from disease, but the nearness of the ocean would lead one to assume that the sea breezes have something to do with it.

The Islanders do not claim to be specialists in certified seed production, fox raising, or anything else, but general farmers following modern methods and using their heads in marketing. They maintain the high quality of potato seed by a system of rigid inspection. This consists of two field inspections, a bin inspection and a final bag inspection, thus using every precaution to assure the certificate, when issued, of meaning something.

Prince Edward Island is a great place for cooperation. Freight rates are high and only a product of high quality can be made to pay. All

products are standardized and sold on grade, experienced salesmen being employed. Fertilizers are bought cooperatively. The handling charge is two per cent.

Dairying, hog raising and poultry keeping are prominent farm activities. One of the first cow-testing associations in the country and the first egg-laying contest were started here. The hogs, as throughout Canada, are Yorkshires, for the Dominion specializes on bacon hogs. We learned by eating it that claim to superiority for Canadian bacon is no idle boast. It has more lean than our bacon and a better flavor.

Twelve Illustration Stations or demonstration farms, scattered throughout the province bring direct to farmers the results of the Experimental Farm's findings. They are regarded as the best means of extension work. Once a year a field day is held on each station where opportunity is given neighbors to see at first hand the various branches of work carried on.

The history of this little province appealed to us, for it was the birthplace of the Dominion of Canada. On September 1st, 1864, at Charlottetown the first conference of delegates representing the separate British colonies in North America was held. This led to the Confederation of the Canadian provinces on July 1st 1867. The Old Colonial Building, where the delegates met, and which now houses the provincial legislature, is made of stone brought across the Atlantic in sailing vessels long before a Dominion was considered.

People Must Eat?

By G. S. WATTS

MIDSUMMER, the season of abundance, at hand. Most markets are heavily supplied with seasonable fruits and vegetables. Prices frequently fall to unprofitable levels. The producer of perishables is forced to sell, with or without profit as it happens to be. He feels, and is, much at the mercy of the market.

But I often wonder whether we, the growers nearest the great markets of the East, are doing what we might to insure profitable sale of our products. Or are we merely offering them to whatever demand there may be at the time we must sell? Are we not taking the matter of demand very much for granted?

Of course "people must eat." Equally certain they will eat as long as there is anything to eat. But this matter of eating is a long, long way beyond elemental necessity. It is the when, the what and the how much they eat of the good things of the garden that interests the horticulturist. No longer is it safe to take demand for granted.

Do the ice-cream manufacturers take demand for granted just because the weather is warm? As this is being written, 6 p. m., July 15, uncounted thousands are enjoying ice-cream desserts. They were reminded of ice cream by bulletin boards in the city, by posters in stores and by a full page in the afternoon paper. How many are there who would have enjoyed raspberries and cream even more if they had only known this was raspberry time, or thought of them for dessert?

Young peas, asparagus, peaches and a dozen other garden and orchard products acknowledge no peers in appeal to the palate. Besides, these and others rank high in balancing the diet. Yet, I wonder greatly, with the endless variety of advertised and enticingly displayed foods, whether we are properly looking after the very foundations of our industry when we depend almost solely on the existent or natural desires of people for vegetables, fruits and berries. Every woman desires to appear beautiful. Does the cosmetic manufacturer depend on that to sell his product?

The Editor Embarks on a Research Expedition

(Continued from page 5.)

There is another field for research in South America and I have been asked to enter that. The beast of burden in the Andes mountains is the llama. It carries the freight where there are no railroads, and in high altitudes where no other animal can be used. I am told that the llama, by some means, has learned exactly how much it should carry and it will bear no more. Each llama, my informant says, can and will carry anything up to 100 pounds but not another pound, not even a half-pound above 100. He says the llama will lie down if anybody puts eight ounces over 100 pounds on its back. I am going to look into that important question. These and others awaiting the trained observer but enough of science for the present.

Some interesting young people are aboard, going to Peru and Chile, mainly engineers or mineralogists serving the big copper or other mining companies. One young lady from the University of Illinois is going to Valparaiso to teach physical education. She has agreed to remain there for three years, and I am told that most of our people who are employed down here agree to remain for a stated time.

We stay in Colon all night and spend a few hours looking at the Panama Canal. Some of our party appear to be interested in the fact that beer comes aboard there.



That depends on how they're graded. An A-1 pack will bring more money, save losses, cut haulage and storage charges on culls and dirt, reduce labor costs.

With a Boggs Potato and Onion Grader you can grade up to 550 bushels per hour of No. 1's and 2's with less than 3% variation from Government sizes, and take culls and dirt, all in one operation. Won't bruise or injure even green stock. And with the Roller Picking Table, potatoes are automatically turned over so that it's impossible to miss picking out rots and defects. A Boggs will help you save, too. It does the manual labor of 3 to 5 men. Must be used on models to be operated by hand or power, \$1200 and up. Quick delivery from our factory at Augusta, N. Y., and Detroit Lakes, Minn. Our salesmen will tell you how to make more money. Mail the coupon for a free copy.

BOGGS
The Standard
POTATO AND ONION
GRADER

321 W. 11th St., CORP.,
221 W. 11th St., Atlanta, N. Y.
For a free copy please send a free copy
of this ad to:
Name _____
Address _____
City _____ State _____

Horse limping? Reach for ABSORBINE

For 15 years Absorbine has relieved hard-worked muscles and tendons—a quick help to reduce strain-swellings. Promptly eases injuries, never blisters, loosens hair or causes lay-ups. A great antiseptic for aiding quick healing of cuts, bruises, sores. Any druggist—\$2.50 a bottle. W. F. Young, Inc., 354 Lyman St., Springfield, Mass.

WHEAT for Seed

You cannot control the market on wheat. Many could increase their proceeds by producing more per acre without extra expense. Hoffman's Lancaster County Seed Wheat is healthy, vigorous, clean—no cockle, ryegrass, or weeds of any kind. Carefully graded. Can produce for you 5, 10 or more bushels per acre. One bushel more per acre pays for new seed. Ask today for price and other information, also samples.

A. H. HOFFMAN, Inc., Box 427
Lancasterville, Lancaster Co., Pa.

When In Need of Lime

Try our improved extra dry Hydrated Lime, superior strength, little moisture. Dealers wanted. Write for particulars.

42% natural lime furnished in all forms.

J. W. BARRICK & SONS, Inc., Mgrs., Woodboro, Md.

When writing advertisers say you saw their ad in **PENNSYLVANIA FARMER**.

Don't deny yourself the profits that come from feeding Park & Pollard feeds.

Our Growing Feed insures quick growth and sturdy birds.

Dependable Feeds for Every Purpose

Poultry Feeds: Lay or Bust Dry Mash - Red Ribbon Scratch - Growing Feed - Intermediate Chick Feed - P & P Chick Scratch - P & P Chick Starter - Dairy Rations: Overall 24% - Milk-Maid 24% - Bet-R-Milk 20% - Herd Health 16% - Milkmaid Calf Meal - Other Feeds: P & P Stock Feed - Bison Stock Feed - Go-To-It Pig and Hog Ration - Pigeon Feed - P & P Horse Feed - Potomac Table Corn Meal.

Farmer's Business Letter

THE recent government survey showing an increase of 2,000,000 lambs in the United States compared with a year ago only added to the gloom surrounding the lamb producer. Prices hit a new bottom during the past week, going to the lowest level since October, 1921. The market is at the lowest point for July since 1915. Previous to 1915 the highest price on record was \$10.60, the top in those days reaching four figures very few times.

The government report places the supply in the West as 9.5 per cent larger than a year ago, an increase of 1,600,000 head, and 7 per cent larger than two years ago. Native states show 400,000 more, a gain of 4 per cent compared with 1929 and 8 per cent compared with 1928. The whole country has 28,458,000 head, against 26,441,000 in 1929 and 26,363,000 in 1928. There were 87.3 lambs saved per hundred ewes this year against 83.9 in 1929 and 89.1 in 1928.

Last week sorting was the hardest in many years, hundreds of loads going through 50/60 per cent "sorts" before buyers were satisfied. Bucks had to come out and sell at \$1 discount from the price paid for the top end. Some full carloads were all bucks and were bought at the reduction late in the week. At the close top fat lambs were selling at \$9.95 and 50/60 buck natives at \$8.85.

Aged sheep have been scarce and gained 25c, selling at \$2.25 to \$2.50, the outside figure being the highest in several weeks. Yearlings declined 75c to \$1 during the week and feeding lambs were off \$1.71.50.

The bearish attitude of buyers on the futures lamb market, which opened at Chicago recently, is a good indication of what the trade expects this summer and fall. Choice 57/65-lb. black face medium wool mountain feeding lambs are being bid \$7 in lots of 300 to 1,200 head, for delivery any time during August, September and October. White face feeders of similar quality wool are bid \$6.75 for August, the contract calling for 57/65-lb. averages.

Hogs

The appearance of \$10 hogs late last week curtailed demand on both local and shipping account and one of the sharpest breaks of the season was the result. Top prices tumbled 60c in two days, going down to \$9.40 on Tuesday where packers seemed better satisfied to buy. The tone of the market was stronger in mid-week and slight recoveries were made, but closing sales were still 25c under a week ago.

Range of prices continues wide, heavy packers selling downward to \$7, while top light weights for the week stand at \$9.55. A year ago \$9.25 was the bottom price on packers and top light weights sold up to \$12.40.

Little change was noted in the market for hog futures. Volume of trade was slightly larger, but is still considerably smaller than several weeks ago. A total of 22 contracts sold during the week, against 14 a week ago. September light brought \$9.50 to \$9.60; July mediums, \$9.15 to \$9.30 and September mediums \$9.45 to \$9.50.

Cattle

The cattle market during the week was an erratic affair, moving higher in midweek on meager supplies and recording some of the sharpest reductions of the season on even smaller receipts later in the week. There was a decrease of 50,000 head, or 28 per cent, at the seven leading western markets during the first four days of the week. Offerings were below any corresponding week in many years. However, according to buyers, coolers are accumulating a surplus of beef even with cattle receipts below normal. The record heat wave has curtailed demand for all meats and is largely responsible for the unusual behavior of the cattle market.

Both yearlings and weighty heaves sold upward to \$10.85, the top for the week. Best grades of steers are 25 to 50c lower than a week ago, while other classes show 50c to \$1 loss, the thin kinds going at the lowest prices since 1922. The years of 1921 and 1922 were the only lower periods since 1915. Cows and heifers slumped 75c to \$1 during the week and sold as much as \$2.50 to \$3 under two weeks ago. Calves lost 50c.

Grain

The heat wave has damaged the grain crop to such an extent that a material reduction in estimates on corn, spring wheat, oats and barley

by henry whites ranged from 26¢ to 35¢ per dozen, browns from 24¢ to 35¢ and mixed colors from 16¢ to 28¢.

Butter and Poultry

Butter prices advanced about one and a half cents during the past week. There was more speculative buying than there has been for some time. Medium and lower grades were in fairly active demand. The extreme heat which has prevailed throughout the producing sections for the past few weeks has curtailed production and pastures in many states are in poor condition.

Live broilers were in moderate supply and fowls were in light receipt during the past week. The demand was good for fancy broilers but slow and lower for fowls. Leghorn fowl from nearby sections were quoted at 15¢ to 17¢ per pound, colored fowl at 20¢ to 22¢. Rock broilers at 25¢ to 35¢. Reds at 20¢ to 25¢ and Leghorns at 15¢ to 25¢.

Fresh receipts of dressed poultry were light and the demand slow. Prices generally held steady. Broilers were quoted at 25¢ to 35¢ per pound and ducks at 18¢.

Tomato Shipments Heavy

The Philadelphia market was flooded with tomatoes at the close of the week. The hot weather has caused the stock to ripen rapidly and has also caused considerable of it to show scald and sun burn. According to the government report over 44,339 baskets of tomatoes were received in Philadelphia by truck on Saturday. In addition to these 54 baskets there were 3,877 twelve-quart baskets and 2,841 crates. These were the heaviest receipts so far this season.

Early in the morning the market was weak but later it became demoralized and prime tomatoes were sold as low as 15¢ a basket and choice as low as 10¢. The best tomatoes did not bring over 75¢ during the early morning. The canning houses will open this week and this may relieve the situation to some extent. Tomatoes are not the only vegetable crop that is depressed. Most all lines are selling very slowly at low prices.

The potato markets were weak and

Produce Market Review

THE Philadelphia egg market was steady during the past week on fine quality eggs. Average offerings, however, sold slowly. On account of the high temperatures over the entire country, both nearby and western arrivals were mostly shrunken, stale and heated. Fine quality eggs were very scarce and brought sizable premiums. Poorer lots were difficult to move and prices were largely a matter of negotiation between buyer and seller.

The New York egg market was firm at the close of the week. Top quality eggs were scarce and in good demand. Prices on the better grades advanced about one cent during the week. Near-

LIVESTOCK

PITTSBURGH

Cattle

Monday's cattle market at Pittsburgh was a dull affair. Receipts amounted to 70 carloads and the demand was light. Trading was slow and prices irregular, although in most cases lower. The decline would average about 5¢. Cattle were 75c to 80c on others. The supply consisted largely of common and grassy stuff. A few loads of weighty fed steers were here, but they were not wanted at last week's prices. The bulk of beef steers and yearlings sold between \$6 and \$8. One load averaging 1,135 lbs. brought \$8.75, but more could not find buyers at that price. A load of 1,140-lb. cattle went at \$8 and a pretty good lot averaging around 1,400 lbs. that had been fed grain brought \$7.50. Most grassy and light butcher cattle carrying some covering sold at \$6.75 with common and thin steers around \$4.50 to \$5. Not many buyers were offered, and they sold lower with other kinds. Good fat heifers brought \$6.50, fair kind around \$5. Cutters and canners brought \$2.50 to \$3 and pretty good calves \$4.50. Bulk of medium bulks went at \$5.60. Pastures are drying up; it is doubtful if rain at this time would do much good, they are so far gone.

Choice steers, 1,200 lbs. or over \$8.00 to \$8.75. Good to choice, do. 7.50 to 8.00. Fair to good, do. 7.00 to 7.50. Plain heavy steers 6.50 to 7.00. Choice heavy-weight steers 7.50 to 8.00. Good butcher steers, 1,000 to 1,150 lbs. 7.00 to 7.50. Fair to good, do. 6.50 to 7.00. Ordinary to fair, do. 6.00 to 6.50. Common, do. 5.00 to 6.00. Good light butcher steers 7.00 to 7.50. Fair to good light steers 6.00 to 6.50. Common to medium, do. 5.00 to 6.00. Inferior light steers 4.50 to 5.00. Feeders 5.00 to 6.00. Stockers 5.00 to 6.00. Choice fat heifers 6.50 to 7.00. Good to choice heifers 6.00 to 6.50. Fair to good heifers 5.50 to 6.00. Common to fair heifers 5.00 to 5.50. Choice fat cows 5.00 to 5.50. Good to choice fat cows 4.50 to 5.00. Fair to good cows 4.00 to 4.50. Common to fair cows 3.50 to 4.00. Canners 4.00 to 4.50. Fresh cows, all in milk 3.50 to 4.00. Choice heavy bulls 5.00 to 6.00. Choice heavy bulls 5.00 to 6.00. Good heavy bulls 4.50 to 5.00. Fair to good bulls 4.00 to 4.50. Common to fair bulls 3.50 to 4.00. Inferior bulls 3.00 to 3.50.

Hogs

Monday's hog market at Pittsburgh was a dull affair. Receipts amounted to 70 carloads and the demand was light. Trading was slow and prices irregular, although in most cases lower. The decline would average about 5¢. Cattle were 75c to 80c on others. The supply consisted largely of common and grassy stuff. A few loads of weighty fed steers were here, but they were not wanted at last week's prices. The bulk of beef steers and yearlings sold between \$6 and \$8. One load averaging 1,135 lbs. brought \$8.75, but more could not find buyers at that price. A load of 1,140-lb. cattle went at \$8 and a pretty good lot averaging around 1,400 lbs. that had been fed grain brought \$7.50. Most grassy and light butcher cattle carrying some covering sold at \$6.75 with common and thin steers around \$4.50 to \$5. Not many buyers were offered, and they sold lower with other kinds. Good fat heifers brought \$6.50, fair kind around \$5. Cutters and canners brought \$2.50 to \$3 and pretty good calves \$4.50. Bulk of medium bulks went at \$5.60. Pastures are drying up; it is doubtful if rain at this time would do much good, they are so far gone.

Choice steers, 1,200 lbs. or over \$8.00 to \$8.75. Good to choice, do. 7.50 to 8.00. Fair to good, do. 7.00 to 7.50. Plain heavy steers 6.50 to 7.00. Choice heavy-weight steers 7.50 to 8.00. Good butcher steers, 1,000 to 1,150 lbs. 7.00 to 7.50. Fair to good, do. 6.50 to 7.00. Ordinary to fair, do. 6.00 to 6.50. Common, do. 5.00 to 6.00. Good light butcher steers 7.00 to 7.50. Fair to good light steers 6.00 to 6.50. Common to medium, do. 5.00 to 6.00. Inferior light steers 4.50 to 5.00. Feeders 5.00 to 6.00. Stockers 5.00 to 6.00. Choice fat heifers 6.50 to 7.00. Good to choice heifers 6.00 to 6.50. Fair to good heifers 5.50 to 6.00. Common to fair heifers 5.00 to 5.50. Choice fat cows 5.00 to 5.50. Good to choice fat cows 4.50 to 5.00. Fair to good cows 4.00 to 4.50. Common to fair cows 3.50 to 4.00. Canners 4.00 to 4.50. Fresh cows, all in milk 3.50 to 4.00. Choice heavy bulls 5.00 to 6.00. Choice heavy bulls 5.00 to 6.00. Good heavy bulls 4.50 to 5.00. Fair to good bulls 4.00 to 4.50. Common to fair bulls 3.50 to 4.00. Inferior bulls 3.00 to 3.50.

Hogs

About 15 carloads of hogs were on sale mostly in good condition in spite of the hot weather. The market was rather slow at about steady prices. Good Yorkers and heavy weights sold at \$9.50 to \$9.80, heavy mixed \$9.40 to \$9.75 and heavies at \$8.75 to \$9.00.

prices at shipping points reached the lowest level of the season.

The market in production districts was around \$2.25 per barrel as compared with \$4 a year ago. Some Pennsylvania potatoes continue to arrive in Philadelphia and on several days around 300 sacks arrived by truck. Prices of this stock have ranged from \$1.10 to \$1.30 per 100-pound sack. W. R. W.

Produce Market Quotations

PHILADELPHIA

Butter—Higher than extras, 35¢ to 40¢; extra, 37¢ to 40¢; 90 score, 34¢. Eggs—Fancy select, 33¢ to 35¢; extra first, 28¢; first, 26¢; second, 19¢ to 20¢. Poultry—Live fowls, 15¢ to 20¢; broilers, 23¢ to 33¢; old roosters, 15¢ to 18¢; pigeons, 15¢ to 25¢; ducks, 15¢ to 20¢; turkeys, 16¢ to 25¢. FRUIT—Apples, N. J., 1/2 bbls., early varieties, 25¢ to 50¢; Dela. & N. J., bus., 4¢ to 75¢. BLACKBERRIES, Md. N. J., 1/2 bbls., 25¢ to 35¢. CRANBERRIES, N. J., 1/2 bbls., 25¢ to 35¢. PEACHES, N. J., 1/2 bbls., early varieties, 75¢ to \$1.25. CANTALOUPE, Md. & Dela., jumbo and extra, all sizes, 25¢ to 50¢. Snap, N. J., 1/2 bbls., wax, 50¢ to 75¢. LIMA BEANS, N. J., 1/2 bbls., 25¢ to 35¢. Md. & N. J., bus. mpr., \$2.50 to \$3.50. BEETS, Pa. & N. J., per bunch, 10¢ to 12¢. CARROTS, N. J., 1/2 bbls., per bunch, 10¢ to 12¢. CABBAGE, Pa. & N. J., 1/2 bbls., 10¢ to 12¢. CUCUMBERS, N. J., 1/2 bbls., 10¢ to 12¢. CELERY, N. J., hearts, per bunch, 20¢ to 25¢. CORN, N. J., 1/2 bbls., 25¢ to 35¢. Golden Bantam, bus., \$1.00 to \$1.50. EGGS, PLANTS, N. J., 1/2 bbls., \$1.00 to \$1.50. LETTUCE, N. J., crates, Big Boston, 50¢ to 60¢. N. J., 1/2 bbls., yellow, 30¢ to 40¢. PEPPERS, N. J., 1/2 bbls., 50¢ to 75¢. PARSLEY, Pa. & N. J., bus., curly, 50¢ to 75¢. RADISHES, N. J., bus., 50¢ to 75¢. SQUASH, N. J., 1/2 bbls., green and white, 10¢ to 12¢. TOMATOES, N. J., 1/2 bbls., and 20¢ crates, best, 20¢ to 30¢. POTATOES, N. J., 1/2 bbls., Cobblers, 50¢ to 75¢. Pa., 10¢ to 15¢. NEW YORK

NEW YORK

Butter—Creamery, higher than extra, 37¢ to 40¢; first, 33¢ to 36¢; second, 31¢ to 32¢. Eggs—White, nearby, average extra, 35¢ to 38¢; extra first, 24¢ to 26¢; medium, 26¢ to 28¢. Poultry—Live, by freight, fowls, 17¢ to 22¢; broilers, 24¢ to 34¢; old roosters, 15¢ to 20¢; ducks, 15¢ to 20¢; turkeys, 16¢ to 25¢. FRUIT—Apples, N. J., Starr, bud, 50¢ to 75¢. BLACKBERRIES, N. J., 1/2 bbls., 25¢ to 35¢. PEACHES, bus., early varieties, medium to large, \$1.00 to \$1.50. CELERY, N. Y. & N. J., 1/2 bbls., bunches, 15¢ to 25¢. LIMA BEANS, bus. green, 33¢ to 50¢. ONIONS, bus. yellow, best, \$1.00 to \$1.25. SQUASH, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢ to 12¢. CORN, 10¢ to 12¢. EGGS, 10¢ to 12¢. CRANBERRIES, 10¢ to 12¢. BEETS, 10¢ to 12¢. CARROTS, 10¢ to 12¢. CABBAGE, 10¢ to 12¢. CUCUMBERS, 10¢ to 12¢. CELERY, 10¢ to 12¢. LETTUCE, 10¢ to 12¢. PEPPERS, 10¢ to 12¢. PARSLEY, 10¢ to 12¢. RADISHES, 10¢ to 12¢. SQUASH, 10¢ to 12¢. TOMATOES, 10¢ to 12¢. POTATOES, 10¢

The Ford truck hauls for profit



WITH the Ford truck, an early start for market means an early arrival . . . and a ready sale of your products, at good prices for the day. You will be gratified by the ease with which this sturdy truck covers the miles, swings your load safely up-hill and down; by the way it takes rough stretches without stiff jolts; and by the abundant power it brings to bear on mean grades, or muddy, miry ground.

You will be pleased, as well, by the unflagging service the Ford truck gives, load after load, day after day; and by its low cost of operation over extended periods of time.

Beneath the good-looking lines of Ford truck bodies is a strong and rugged chassis. The 4-cylinder engine develops 40 horse-power at 2200 r.p.m., which is but a moderate engine speed. A specially designed carburetor



and hot-spot manifold; valves of large diameter; cylinder head of special design; and aluminum alloy pistons all contribute to the performance of the Ford engine.

Features of the chassis, which are of great importance to your satisfaction with the service of the truck, are the 4-speed transmission; provision for power take-off mounting; new, larger brakes; heavier front axle and spring; new spiral bevel gear rear axle; and the dual rear wheels available at small additional cost.

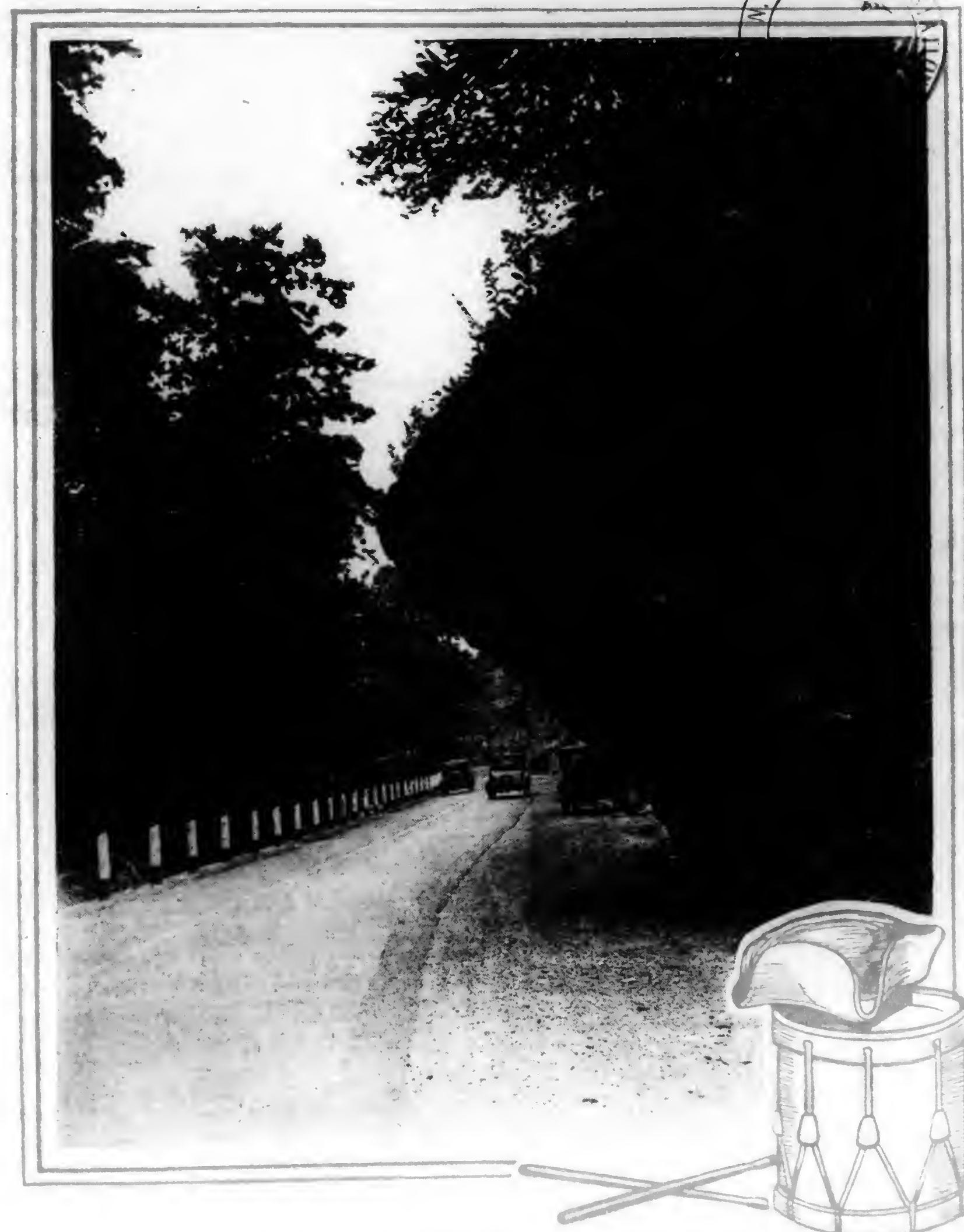
Go to your Ford dealer, see the sturdy and handsome bodies with which the truck is equipped, and examine the chassis in detail. Let the dealer show you at what small cost you can own and operate a Ford truck, and how profitably it can serve you.

PENNSYLVANIA FARMER

Published
Weekly

Established
1877

August 9, 1930



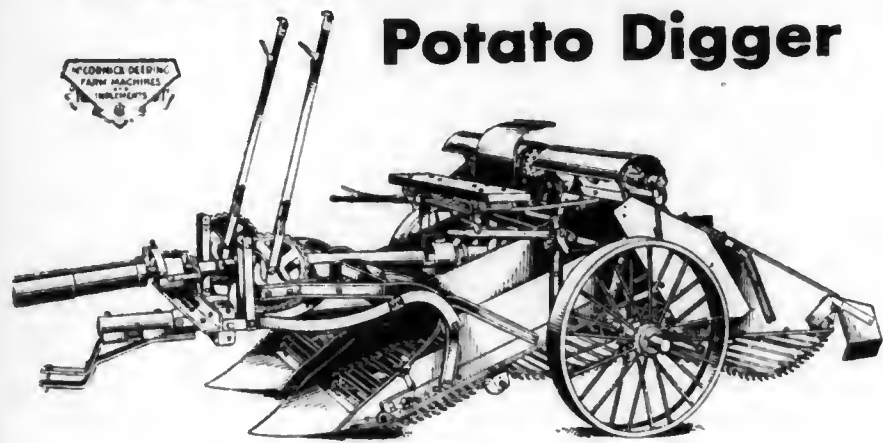
Philadelphia

Pittsburgh

Harrisburg

Here's the New, Power-Driven

McCORMICK-DEERING Potato Digger



Built for use with tractor power take-off

Power from the power take off of the tractor operates the elevator of the new McCormick-Deering Power-Drive Potato Digger. Regardless of soil conditions, agitation is always positive. The potatoes are clean. Time is saved. Labor and other harvest expenses drop.

In soils where finer control of elevator agitation is required you can use the special automobile-type transmission available on special order. It has three speeds forward, and one re-

verse. You can change the speed of the elevator to get exactly the right amount of agitation for all soils, regardless of the forward rate of travel. The reverse feature is helpful in dislodging stones caught in the elevator links.

The entire machine is built extra strong to work with tractors. You can tell at a glance it's made to last. One- and two-row types. Ask the McCormick-Deering dealer to show you the new McCormick-Deering Power-Drive Digger. Write for a folder.

INTERNATIONAL HARVESTER COMPANY
of America
606 So. Michigan Ave. (Incorporated) Chicago, Illinois
Branches at Pittsburgh, Harrisburg, Philadelphia, Pa., and at 95 other points in the United States.

McCormick-Deering

GET YOUR SHARE

ONLY a short time left to profit by the greatest summer sale in Ward's history. Over 2,000 real bargains, including everything you need from home furnishings to wearing apparel. Millions of families are seizing this opportunity to buy necessities during this cut-price sale. Our regular low prices have been still further reduced, so you make a double saving by ordering now. Why not check over your sale book now and get your share of these unusual bargains?



**THIS GREAT
SALE
ENDS AUG.
31ST**

MONTGOMERY WARD & CO.

SAVE AND BUY

Quick Acting
Fine as Flour
Low Cost

ALBA MARL

Nature's Soil Remedy
All Available
Granulated For
Easy Sowing
WHILE FOR GUARANTEED DELIVERED PRICES TO...
ALBA MARL LIME COMPANY, CHARLESTOWN, W. VA.

Many of our advertisers

offer to send booklets and other descriptive material upon request. You will profit by asking for them and reading them with care. Make sure that the product advertised exactly fits your need. Mention the fact that you saw their advertisement in the PENNSYLVANIA FARMER.

Farm Facts and Fancies

By ALVA AGEE

BULLETIN 252, of the Pennsylvania Experiment Station, brings us a report of results from the second four-years' test of fertilizers on the plots laid out in 1916 and 1917. They were cropped four years without fertilizers to determine any variation in fertility. This experiment supplements the one that has been running nearly fifty years. The check plots in the latter have had no lime or fertilizer in that time. Some tests were needed in which the various forms of phosphorus could be compared under more normal conditions, and more sure information could be gained about the effect of nitrogen and potash on this Hagers-town loam and especially about the value of manure.

The nine check plots in each of the four series of forty-one plots are given a liberal application of superphosphate and potash, and all lime requirements are met as they appear. Lime, likewise, is applied to all other plots, except in case of four manured ones.

Soil Unevenness

There always is variation in soil fertility to harass an experimenter with soils and crops. In this case I presume a total area of twenty acres was needed for the 144 plots. A long-time test gets this unevenness ironed out in time, I suppose, and yet when a plot has the advantage of initial headway it seems to run under its own steam for a long time. An instance in this experiment is plot 33 which had in it a bluegrass sod that had belonged to a service road. The first year of the test No. 33 had the highest yield of corn, and seven years later it had the highest yield of hay, and this would mean a heavy sod to turn down for corn in the third four-years test. If this was in the series growing corn in the first year, the effect of the old sod is most evident.

I mention this especially because it is a plot receiving imported basic slag and seems to show a big superiority for that carrier of phosphorus that it may not possess. I find no report for plot 34 which shared this sod and might have afforded additional check on variation.

Possible Profit

Plots 36 and 38 do not indicate much superiority for the slag. The one receiving manure and basic slag gave a total value of crops for the four years only two-and-a-half per cent greater than the plot given superphosphate instead of slag. These two plots may be the ones that finally will give us conclusive data. Plot 13 is the other basic slag plot, and here too it seems to have a distinct advantage in soil fertility because the first corn crop in the eight years was eighteen per cent greater than that of plot 4 receiving superphosphate instead. Time will probably reduce this spread.

Rock Phosphate

So far as this experiment has run rock phosphate has failed to make a good showing. Theoretically, it should do better in an acid soil, but results were about the same in limed and unlimed land. Plowing it down gave no better results than harrowing it in. It is idle enough to try to forecast the outcome of a long-time soil test, but the chances are that this experiment will confirm the judgment of most practical farmers on eastern land that superphosphate is a more satisfactory purchase than the untreated rock.

Gypsum and Sulphur

Tests show appreciable gains from the use of gypsum with rock phosphate and also in the case of sulphur with the rock. It is an important test only so far as the use of rock phosphate may extend. In superphosphate we make liberal applications of these materials. The fact that the

State College scientists did not regard it as worth while to use any plots for test of gypsum and sulphur where superphosphate was used should be conclusive with the farmer that he should not make any investment in them when using superphosphate.

Many Problems

The relative value of manure and fertilizers, the need of purchased nitrogen on this land and other soil problems will be studied under conditions that are not present in the great field experiment started in 1881. An interesting test is in the case of plot 27 where the superphosphate is plowed down and in that of plot 24 where it is harrowed in. So far the gain from plowing down is material and yet not large enough to be conclusive. This long-time experiment on 144 plots, planned by trained experimenters, will add much to the high reputation this Station has earned.

A Lesson for All

Every one should see the pictures taken on Commander Byrd's expedition to the South Pole. The quality of courage remains with the human race today in as high degree as ever. I enjoyed the marvels of that new region, but the greatest marvel was the sustained courage of that group of men. A program had been mapped when they were in security at home, and it was carried out with precision on the plane trip to the Pole when supreme danger faced Admiral Byrd and his party. We can think more highly of ourselves when we realize that such possibilities of sustained courage are bound up in human nature.

The lesson I got, and the one every young person should have, is that if one has vision, even in the humblest undertakings of life, and works out his plan to the last detail possible, and then has the courage to stand by his conviction, he is pretty apt to be a winner. Some of us lack vision, some of us lack the willingness to plan carefully, and the most of us lack sustained courage. Then we blame the world and talk about not having a chance.

A Handicap

Your physician says to you, "How are you feeling today?" The veterinarian is at a disadvantage because his patient cannot help in diagnosis. Right there is the handicap of the soils and crops scientist. The material with which he deals is too inert for any rapid headway, and too often when he asks a question and thinks he has got an answer it really is an answer to some other question. This confusion holds us back. There have been enough years and plots to tell the whole story of soil fertilization, but when we think we are putting two and two together and surely getting four, the soil has been putting half a dozen with the two and the answer should not be four. Gradually we accumulate some sure knowledge but quite gradually.

Uses for Car Exhaust

THE deadly carbon monoxide, the exhaust from your car or tractor, the chief use of which seems to be for unintentional suicide by those who carelessly operate cars in close garages, has other uses. By attaching a hose to the exhaust pipe and other vermin which infest buildings can be quickly eradicated. Insert the hose under floors or into other nooks where they nest, step on the gas and the trick is done. Cure not to flood the engine and cause back-fire is important, and fire-fighting apparatus should always be close at hand. Of course this should not be tried with the car or tractor inside a building.

Gilbert Irwin

Taxation

By W. D. ZINN

THE drouth, with its effect on crops, and the prices of livestock have brought to the front the matter of taxes as I have never seen it before. It is said that the last straw broke the camel's back, and I am wondering whether the last straw has not been laid on the tax payer's back. At any rate he is groaning under it as I have never heard him groan before.

A certain class of our people are saying, "Classify our property for taxation and it will relieve the taxpayer." Maybe so. But when they say, "Put all money and bonds at a rate not to exceed 50 cents on the hundred dollars," I become a doubting Thomas at once.

They tell us that this will bring millions of dollars from their hiding places. Maybe so. But I doubt if you can make men honest by legislation. If this were true would it be fair to assess our farms at \$2.50 on the hundred and let money and bonds pass at one-fifth of that amount? I am willing to admit that money should have a lower rate than farms and buildings for the reason that the latter are rarely valued at their full actual value, but the difference is too great.

There is but one fair way to value any kind of property and that is on its earning power. If farms were valued on that basis now the valuation would be very low. I am told that in Ohio they have property classification for taxes and that the rate on farms does not exceed \$1.50 on the hundred dollars. In many districts in West Virginia the rate is \$3. If the farm is valued at \$50 per acre the taxes would be \$1.50, which is often more than the farm would bring if rented. In other words, many farmers are renting their own farms. I am wondering how long farmers will endure this.

Red Rescue

A FEW years ago we noticed a grass coming on one of our farms. It was almost blue in color and the stems or blades were hard, tough and rather stiff. We watched this new grass and soon saw that it was spreading rapidly. On digging it up we found it to have a massive system of roots and it would grow on very thin land. Recently we found it growing on the campus of our University.

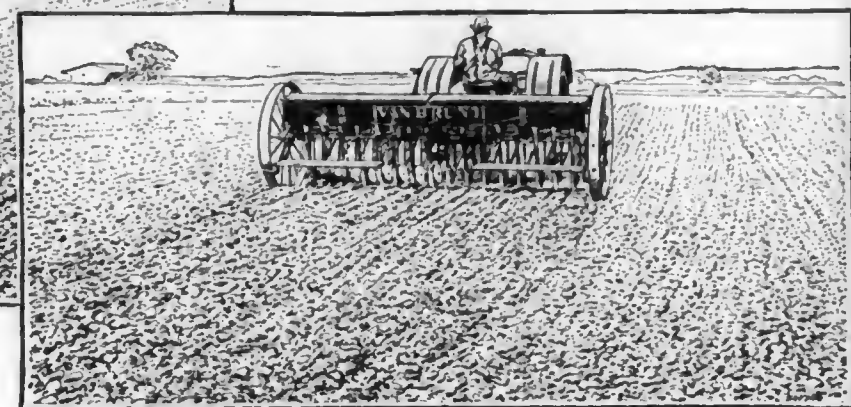
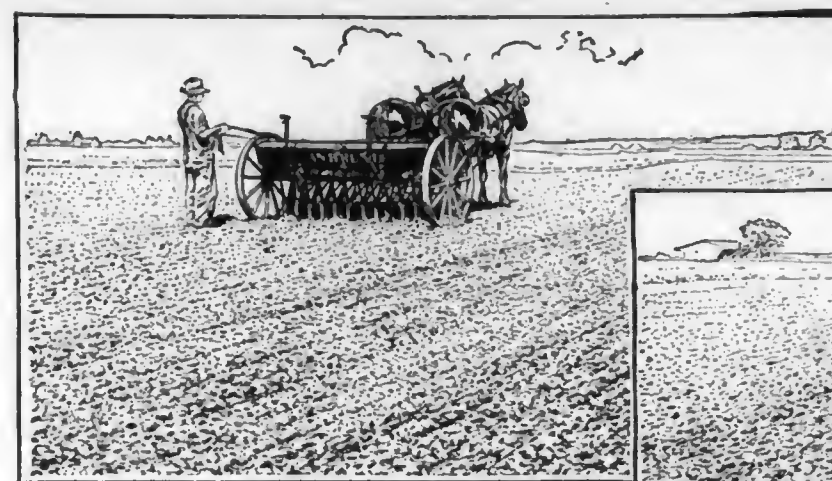
There is one drawback to this grass that I have discovered, and that is that stock do not relish it. They eat it only when there is no bluegrass that they can get. It seems to have the ability to crowd out weeds and other grasses, but it is here and I know nothing that we can do but grin and bear it.

Rearranging Fields

WHILE visiting my good friend James Carskadon of Mineral county, W. Va., I was shown how he had thrown out into the permanent pasture fields the unutilized land from his cultivated fields. He stated that nothing had been done on his farm that had proved more profitable. Not all farms are so situated that this can be done, but it could be done on hundreds where it is neglected.

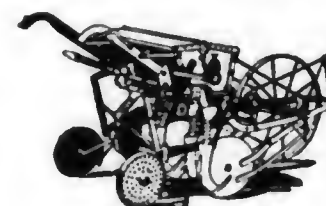
Only this week I received a very interesting letter from an ambitious young farmer in Pennsylvania. Among other things he told me he had laid out his 85-acre farm into seven fields 11 1/2 rods wide and 96 rods long. For most crops this size field is very convenient, but it seems just a little narrow for corn where it is desired to check the corn. If it is possible I would suggest that two of these fields be thrown together for corn. Even this would make it a little narrow for checking corn.

Economy of both time and money must be practiced by the farmers of the future and long fields will tend to economize time in cultivating our land.



It's Always Good Business to Try for More Bushels Per Acre

A farmer may have good reason for reducing the acreage of a certain crop, but it is always good business to keep on trying for more bushels per acre, because the more bushels you produce per acre the less it costs per bushel.



A DEPENDABLE ONE-HORSE DRILL

The John Deere Van Brunt One-Horse Fertilizer Grain Drill is similar in every respect to the larger machines. It is used extensively for seeding between rows of standing corn. It is a money-saving machine for the farmer with small acreage. Strong and simple to operate.

Proper application of fertilizer with a John Deere Van Brunt Fertilizer Grain Drill, at the same time the seed is planted, benefits your crops right from the start, hastens maturity, increases the yield, improves the quality and insures bigger profits.

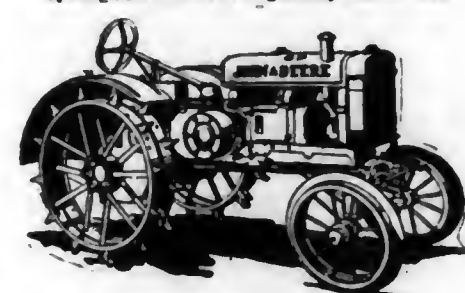
Any standard fertilizer can be distributed in quantities from 65 to 1250 pounds per acre. Finger type feeder wheels and knockers prevent the fertilizer from choking up in the hopper.

Adjustable Gate Force-Feeds handle a large variety of seed in any quantity per acre and assure accuracy under all conditions.

John Deere Van Brunt Fertilizer Grain Drills can be furnished with either horse-drawn or tractor-hitch and with your choice of furrow openers—single disk, double disk, shoe or hoe.



John Deere No. 4. The strongest two-bottom plow ever built. Constant power lift—a great feature when plowing deep or in heavy trash, raises bottom to the same high position regardless of depth of plowing. Cushion spring release hitch regularly furnished.



The John Deere General Purpose Tractor for the row crop farmer—a tractor of standard design that plants and cultivates three rows at a time and does all farm work equally well within its power range. Has four sources of power—drawbar, belt, power take-off and power lift, which raises planter, cultivator and other equipment.

Your John Deere dealer will be glad to show you the equipment described here. See him the next time you are in town. Write for free folders. Address John Deere, Moline, Ill., and ask for folder VL-436

JOHN DEERE

THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

WHEAT for Seed

You cannot control the market on wheat. You can, however, increase your proceeds by producing more per acre without extra expense. Hoffman's Lancaster County Seed Wheat is hardy, vigorous, clean—no cockle, rye, gerle or weeds of any kind. Carefully graded. Can produce for you 8, 10 or more bushels per acre. One bushel more per acre pays for new seed. Ask today for proof and other information, also samples.

**A. H. HOFFMAN, Inc., Box 427
Landville, Lancaster Co., Pa.**

The PERFECT CORN HARVESTER

Sold Direct \$23.75 JUST THE THING TO STOCK or SILE CUTTING

Works in any kind of soil. Cuts stalks, doesn't pull them. Cuts 4 to 7 acres a day with one man and horse. Great labor saver. Sold direct to farmers. Get your catalog NOW—Be prepared. Write: LOVE MANUFACTURING CO., Dept 206 Lincoln, Illinois

CORN HARVESTER

Best and fastest machine built. One and two row 8 & 2 ft. models. One horse. Carries 10 shocks. Big labor saver. Pays for itself in one season. Worked by 1, 2 or 3 men. No twine. No danger. Great for stalk cutting. Free trial. Agents Wanted. Write for free catalog. BENNETT MFG. CO., Box 805 Westerville, Ohio

When In Need of Lime
try our improved extra dry Hydrated Lime, superior strength, little moisture. Dealers wanted. Write for particulars. Agricultural lime furnished in all forms. S. W. BARRICK & SONS, Inc., Migs., Woodboro, Md.

Every Advertisement

in this paper is a buying guide to better value. Read all the advertisements—big and little. Make it a habit. If there is not sufficient information in the advertisement itself upon which to base judgment, write to the advertiser for his printed matter.

If you have a definite problem that the advertiser should be able to help you solve, assuming of course that your problem touches the goods he manufactures, write to him for specific information. Tell him that you saw his advertisement in this publication and you will receive prompt and courteous attention.

The Advertisements are friends of your pocketbook.

Your Opportunity

Prices Based Upon Earning Power

Farms For Sale

The time to buy farms is when you can get them at prices assuring you a

Low Overhead and Capital Investment

We have the type of farms to meet your requirements.

Write Dept. H.

The Federal Land Bank of Baltimore, Md.



FARQUHAR NEW INTERCHANGEABLE GRAIN DRILLS

Here is the most completely satisfactory Drill combination. Sows accurately all kinds of grain with wide range in quantity; grass sower; fertilizer sower according to the latest approved method. Well balanced, light draft and easily operated.

But the Big Outstanding feature is the simple method of changing the Hoe drill to a Disc Drill—and this change can easily be made in 20 minutes. Ask for Big Bulletin No. 339.

A. B. FARQUHAR CO., Limited
Box 346, York, Pa.

DIBBLE'S SEED WHEAT

HONOR recommended by New York State Department of Agriculture as the best White Wheat for a year. For the Dibble Farms and we offer same to you. Our extra, choice, selected and graded 6 \$1.50 per bushel, sacks of 50, 40 and 25 pounds per sack on large Philadelphia lot at 10 cents per bushel.

Edward F. Dibble Seedgrower
Box F Honeyey Falls, N. Y.

PLEASE say: "I saw your ad. in Pennsylvania Farmer."



NESHAMINY GARDENS

By R. P. KESTER

In order to keep my readers informed on the current events around Neshaminy Gardens and the people connected with it, I shall drop my reminiscences for this time and discuss present-day happenings. I have been wondering whether there is any general interest in the series which has been appearing here. The present age seems to be living in the present so exclusively that it may not want to have its attention diverted either to the past or the future. But it should remember this: You can't shoot straight without having a hind sight and a front sight on the gun.

Business at Neshaminy Gardens, so far as active, productive work is concerned, is at low-water mark this year. Three things conspire to this condition this year. I shall treat them in their order:

Japanese Beetles

First, the destructive work of the Japanese beetles last year was discouraging, and we had reason to believe that they would be worse this year. They nearly put the peach trees out of business by eating the leaves, and they injured the grape vines and greatly lessened the yield of sweet corn. Other crops were more or less injured.

Up to last year, smartweed grew luxuriantly wherever the ground was not occupied or cultivated continuously. The beetles prefer smartweed to anything else, and we had no trouble from them. But smartweed has almost disappeared from the place. This weed is propagated from seed only. Did the loss of leaves caused by beetle work prevent seed formation for two or three years, and this cause the disappearance of the weed? We do not know.

But the beetles are bad this year—worse than they have been. The crippled peach trees are again infested, and it begins to look as if they might follow the smartweed to the land of oblivion.

I was down in the orchard last evening and this is what I saw: Some of the trees have fruit on them and this is being eaten as well as the leaves on the trees without fruit. Those who never saw the beetles at work can do in a short time. In the first place, Japanese beetles are extremely sociable little cusses. They are always found eating in groups and squads. You scarcely ever see a lone beetle eating by himself. They have a picnic wherever they eat. Last evening I counted as many as 65 beetles camped on one peach. I had a bucket with some water in it and by holding the bucket under the peaches and touching them, the beetles would let loose and drop into the water. They eat every particle of pulp from the pit of a peach and leave the seed hanging there without a scrap of flesh on it.

Just how long they will be so serious and destructive remains to be seen. I find that they are less destructive now around Riverton, N. J., where they started, than they were some time ago. Possibly the parasites which were introduced to combat them are getting the best of them. If so, that is one thing that the vast outlay of money expended to fight them has to its credit. But most of the work is a pure waste of money as far as actual results are concerned.

Market Conditions

Another thing that prevented any extensive plantings this year at Neshaminy Gardens is the revolution that has taken place in the last three years in the distribution and sale of vegetables and fruits. Ever since last February we have been buying almost everything in these lines for less money than we have always sold them for, less even than it cost us to raise them. The chain systems of merchandising and the great development of rapid transportation methods make it possible to bring everything from sections where cost of production is so much less than the farmer who has high-priced land, and where labor costs are high, has a difficult condition to meet.

The Weather

We can't say that we knew we were going to have unfavorable weather as a third reason for limiting our operations this year, but we are glad we did not lay out to do a lot of work. This has been a phenomenal year so far. At present we have an accumulated excess of temperature for the year of nearly 600 degrees, this in spite of the fact that there were many very cool spells. While the rainfall for the first seven months of the year has been practically normal, it has been made up of dry spells and wet spells. As this is written we are having a drought which threatens to be damaging if it does not rain soon.

Personals

Wife and I spent a week-end recently with Son and family at a South Jersey seaside resort. It was during one of the hottest spells we have had. The first day, Saturday, was delightful because we had a sea breeze. But on Sunday the wind was from the land, and if there is a hotter place than a seaside resort when it is hot I don't want to go there. That's going to keep me in the straight and narrow way.

But it was worth the trip to watch the little two and one-half year old granddaughter disport herself in the water. Such unrestrained glee is seldom seen. She takes to it like a young seal takes to water.

Cash Instead of Trade

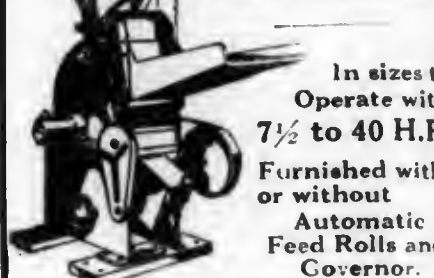
The good old custom of trading work in our neighborhood has changed to cash and careful counting of hours in threshing, shredding, fence building and every other task. We had to do it. We could not say no to the neighbors with the little crop who called for aid in threshing, but when they failed to show up to help us and pleaded sickness or went away from home when the threshing machine pulled in, we had to defend ourselves. And the little crop man was not the only sinner either. Often the big farmers imposed on their neighbors shamefully.

It sounds mercenary and people say the old spirit of helpfulness is passing, but it is less trying than the other way. It also looks like putting money from the right hand to the left and counting it gain, but we have made the stingy neighbors and the lazy ones come to time. If a man wants help he must pay without argument. Somebody keeps time at each job, and if there is any haggling over trifles no help is given to the one who is never satisfied. In the long run we probably are not a cent ahead, but in keeping our tempers and knowing that we have forced some folks to do their share there is great satisfaction. Woman Farmer.

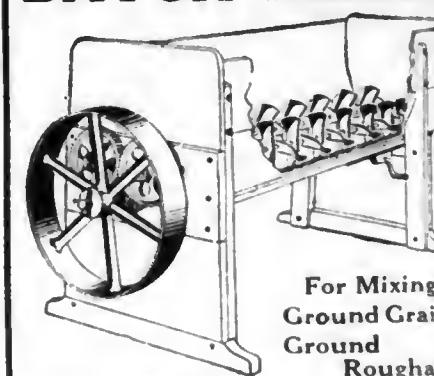
IN OPERATION
At All Principal Fairs

DELLINGER Hammer Type MILLS

PRICED AS LOW AS \$110.00 F.O.B. Lancaster



In sizes to Operate with 7½ to 40 H.P. Furnished with or without Automatic Feed Rolls and Governor.

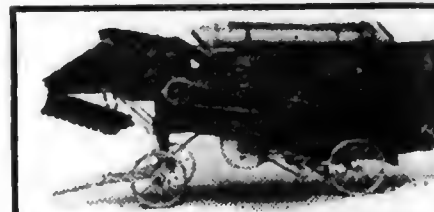


For Mixing Ground Grain, Ground Roughage

ON DISPLAY

Combination Mills, Feed Mills, Fodder Shredders, Concrete Mixers, Wood Saw and Tractor Saw Frames

A. M. Dellinger, Lancaster, Pa.



FRICK THRESHERS

Take the Grain Out of the Head and Save It

They satisfy your customers because they thresh fast, separate, thoroughly clean and save the grain without annoying delays. They satisfy you because of their low operating cost and smooth running qualities. Frick Threshers, reliable trade and home use, earning capacity.

Three sizes:—20x34, 24x42, 28x48

Write for prices and liberal terms.

FRICK COMPANY, Waynesboro, Pa.



Safe, Dependable. More money from your crop. Write today. Check items wanted.

ROSS CUTTER & SILE CO. 284 Ward, Springfield, O.

Get Rid of CANADA THISTLES

The Little Wonder Weed Exterminator will positively destroy them.

A spraying solution (not a chlorate); costs only 6c per gallon; will not ruin the soil nor kill cattle. Write for free illustrated booklet.

REBER CHEMICAL COMPANY Reading, Pa.

Read the Advertisements

they help you get the most out of life and save you time and trouble doing it.

More Readers on Farms in Pennsylvania than Any Other Farm Paper

PENNSYLVANIA FARMER

Consolidated with

PENNSYLVANIA STOCKMAN and FARMER

Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of Mar. 3, 1879.

PUBLISHED EVERY SATURDAY BY

CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., August 9, 1930

No. 6

The Editor Continues His Research Expedition

By E. S. BAYARD

WE arrived at Colon on time, 5 p. m., but it took a little while to dock. Several ships were in the harbor and one was coming out as we went in, churning up the yellow mud of the bottom as our ship did. We took automobiles at once for the Gatun locks, for we will not see their operation so well when we pass through on the ship. These famous locks raise the ship a total of 84 feet to the level of the Gatun lake, taking three hitches at it. In the upper basin I saw a fish jump and asked a policeman of what species it was. He said it was a tarpon. He caught 276 tarpon in one year, the largest 160 pounds. Used a spoon or live bait and fished in the lake. We went back to Colon or Christobal, partly in daylight and partly in the night, for there is no dusk in the tropics, with the setting of the sun it is dark. And that reminds me that the complexion of a large proportion of the population of Panama is dark. There are African negroes, black men from the East Indies, and then the colors shade off to Syrians and Chinese.

Work Habits

We are told that the African negroes will work only to get enough to eat and drink, that they care little for anything more and will not work unless under the spur of such necessity. The East Indians have little strength and are not adapted to hard or continuous labor. The Syrians and the Chinese are usually not workers but traders or merchants. The first three saloons I saw in Colon were the property of Chinese, and most of the souvenir sellers appear to be Syrians. The Chinese are successful merchants here as everywhere. The Syrians do not operate on the one-price principle as a rule. A Chilean lady who bought a silk shawl got it for one dollar less than half what the Syrian first asked for it.

Prof. Metzger and I tried shopping a little but the intense heat and high humidity drove us back to the ship without anything but a few postal cards and a linen suit. We thought it might be cooler when we came north—it can't be much hotter.

Christobal (accent on the o) and Colon (accent on the second syllable) are essentially one city, but there is one difference. Colon is wet, Christobal is dry, and it is necessary to cross a principal street in order to allay thirst for alcoholics. There are cool spots—in both towns—whenever the sea breeze gets in as it does in the hotel Uncle Sam has provided for Christobal. Of course the reader knows that Christobal is dry because in the Canal Zone under jurisdiction of the United States and Colon is wet because it is in Panama. Both towns were celebrating the Fourth of July, chiefly with fireworks, when we were there in the evening of the 3rd.

Back on the ship we had an interesting conversation with an American resident of Colon, an engineer in government service. He told us that our government had made several attempts to establish agricultural industries in the Isthmus. A thousand-cow dairy was one of them, but it was not successful. The high-priced Holsteins brought down from our country died, not being adapted to the climate or accustomed to the diseases prevalent here. The half-bred animal—half native and half Holstein—will do better than either of its parents.

Another dream was to establish a beef cattle industry, with apparently bountiful vegetation and

plenty of land. Thousands of beef-bred cattle were brought down, but they died off so fast that they were slaughtered and put into cold storage to save something out of the investment. An attempt to establish a hog ranch was just about as successful as the beef cattle enterprise. This part of the world isn't adapted to animal industry.

Banana growing is on the wane because of a disease of the roots. Bananas require a rich soil, heat and moisture. They grow wild here in Panama and conditions appear to be ideal for the establishment of a great industry, for there is plenty of virgin soil, heat and moisture. Our friend said that he could show, on paper, that any farmer could get rich raising bananas, but it don't

a cog-rail and in a slot. Three of these cables are attached to each side of the ship, the engines are started and the ship is drawn into the lock. The gates are closed and the water is let in from the lock above, lifting the ship to the level of the next lock. The engines climb up to the next level on their cogs, the gates are closed and the same thing occurs, the third lock being at the level of the lake, into which the ship moves under her own power.

The trip across the Isthmus and through two more locks requires about seven hours. A dozen negroes leave the ship at Panama. They have been on board to handle the cables. Our ship pays about \$4,500 to go through the Canal. Some ships put on a gang of painters at one end of the Canal and come out of it with the painting job finished. The temperate zone is good enough for me. I don't sigh for coral strands or waving palms or any other tropical appurtenances.

Early School Days

ON July 4th our community held its fourth annual get-together picnic at Maple Grove school house. About 100 were present, almost half of whom at one time were pupils of the school.

Sixty-four years ago the boys planted maple trees in the school yard. The trees are still furnishing shade, but the boys have passed over and are resting in the shade on the other side.

In this district, although not at this location, was established the first school in our section more than 100 years ago. Uncle Billy Hasson, who was a pupil of the school, 40 years ago gave the writer a history of this first school. The house was of logs chinked with mud. It had two windows. The term was three months; hours from eight a. m. to six p. m.; wages of teacher \$16 per month and board. The roof was made of split (not shaved) clapboards, the floor of pounded clay.

Snow would sift through the clapboards and when the room was heated the water would run down and form puddles. The boys in going to and from classes splashed through the puddles.

The seats were made of split logs hewn on one side with stout pegs for legs. They had no backs or book rests. The only branches taught were the "three R's"—readin', ritin' and 'rithmetic. But these few subjects were pretty thoroughly mastered and, combined with native common sense and industry, saw a good many worthy people through life.

Winter came before they got the chimney of mud and stones completed. A hole was left in the roof for the smoke to escape. On windy days it blew back so school had to be dismissed.

There was no age limit and no truant officers, but school opened too late and closed too early for fishing, so there was little truancy. The pupils studied out loud, so the teacher could tell if they were idle.

The township did not furnish fuel, so the large boys cut saplings, hickory, oak and maple, from the surrounding woods in proper lengths and the girls and smaller boys carried it in. The pupils and teacher were clothed entirely in homespun and home-made clothing with coon or bear-skin caps and moccasins. But most of these boys left paths which we moderns are safe to follow.

Venango county Pa. O. C. Sigworth.

A Little Bit of Heaven

By C. P. McDONALD

THERE'S a little bit of Heaven in the sunrise o'er the hill,
In the majesty of mountains and the rippling of the rill;
In the whisper of the tassels as they flutter on the corn,
And the blushing of the roses in the first sweet flush of morn;
In the story of the blossoms and the glory of the trees,
In the spell of earth's enchantment and the droning of the bees;
In the robin's gay rejoicing and the bluebird winging free,
There's a little bit of Heaven God has made for you and me.

There's a little bit of Heaven in the fields of waving grain;
In the cheerfulness of noonday as a rollicking refrain;
In the heart of every farmer, as he's turning up the soil,
Is a pean of thanksgiving for the fellowship of toil;
In the shimmer of the pastures and the fulness of the fields,
Is a glimmer of the bounty that the glad earth freely yields;
In the laughter of the orchard, echoing from tree to tree,
There's a little bit of Heaven God has made for you and me.

There's a little bit of Heaven in the twilight peace of night,
When behind the hazed horizon sinks the sunshine's smiling light;
In the chirping of the cricket and the whippoorwill's soft cry,
And the mystery of the clover as it sifts among the trees;
In the perfume of the flowers by the meadow-scented breeze;
And the mellow mood of nightfall bringing dreams of days to be
There's a little bit of Heaven God has made for you and me.

work out that way in practice. In fact it always works out the other way for the innocent investor. One trouble of course is the fact that in this open part, where the commerce of the whole world passes, all kinds of diseases and pests come, for quarantine against such things is practically impossible.

Through Gatun Lock

Panama has several varieties of snakes, three of them poisonous—the fer-de-lance, the coral and the rattlesnake. The box constrictor is here too, for most of Panama is still a tropical jungle and will be so for many a long year. Wherever a clearing has been made constant care is essential to prevent the jungle from overwhelming it. Heat and moisture bring on vegetation with incredible rapidity. Our friend reported 33 inches of rain in three days as the record fall in his experience. That is more than three-quarters of a year's precipitation in our territory. The total rainfall on the Isthmus is about 110 inches a year.

We left Colon at nine o'clock on the Fourth of July and were soon at the famous Gatun lock. As the ship approaches the lock two negroes in a skiff bring out a rope, which is taken aboard our ship and a wire cable is drawn out, a loop in its end to hang over the capstan. On the shore end of this cable is an electric engine, running on rails,

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published Every Saturday by
CAPPER-HARMAN-SLOCUM, INC.
3301 Penn Ave., Pittsburgh, Pa.

President: Arthur Capper
Vice-Presidents: T. D. Harman, Geo. M. Slocum
Manager: Miles Horst, G. W. Harris

EDITORIAL STAFF
Editor-in-Chief: E. S. Bayard
Editors: C. L. White, J. C. Gilpin
Field Editors: Miles Horst, G. W. Harris

EDITORIAL OFFICES
Pittsburgh Harrisburg Philadelphia

CONTRIBUTING EDITORS
R. E. Kester J. G. Lippman
Alva A. A. H. C. Knaedel
T. W. Light R. L. Scharringhausen
R. L. Dillingham A. A. Bortland
J. E. Shigley W. W. Fletcher
W. D. Zinn Mrs. Gertrude Steiner
F. L. Beutler Gilbert S. Watts

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Canadian subscriptions Fifty Cents per year extra for postage

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for livestock and classified advertising. No deceptive, immoral or swindling advertisement inserted at any price.

Member: Agricultural Publishers' Association.
Audit Bureau of Circulations.

Volume 103, No. 6 Established 1877

It is with deepest regret that we announce the death of Mrs. Sarah Kreider-Horst, wife of Miles Horst, which took place on July 28th at the Good Samaritan Hospital, Lebanon, Pa., after an illness of five months. Mrs. Horst was the daughter of Rev. and Mrs. Christian F. Kreider of Cleona, Pa. She was married to Miles Horst, Pennsylvania field editor of this paper, on March 24, 1928. The deceased is survived by her husband, mother and father, three sisters and two brothers, who have the sincere sympathy of their many friends.

PROTECTORS OF WILD LIFE

DOWN in Tennessee the state game warden requested farmers not to destroy quail's nests during the mowing season and was flooded with replies pledging protection to the bird. There is nothing surprising in this, for farmers not only appreciate the value of birds but are at heart natural protectors of wild life. This is most fortunate, since they are in position to render greatest aid in the conservation of this natural resource. It is a service to themselves and to the commonwealth, and like many other unobtrusive things deserves more credit than it gets.

CORN HIGHER THAN WHEAT

ON Tuesday of last week corn topped wheat on the Chicago market for the first time in 28 years. July wheat sold down to 85¢ and July corn closed at 86¢. This in spite of the fact that wheat has been the recipient of special favors for a year, while corn has had to shift for itself. The wheat crop is made, at least the winter wheat, but corn is still at the mercy of the weather, which to date has been most unmerciful. Hot winds on parched and sun-baked fields are more potent price-fixers than well-laid plans or government policies. Their ruthless remedy for a burdensome "surplus" is as effective as it is painful. No one can or wants to be held responsible for this form of farm relief.

MEAT CONSUMPTION

STATISTICIANS tell us that production and consumption of meat during the last 30 years have kept step with each other. Production has increased about as fast as population. From this it is declared that "there

is no surplus meat problem in the agricultural situation." Neither is there a shortage or any sign of one at present. The average person in this country is said to eat about as much meat as 30 years ago or 140 to 150 lbs. a year, which must be a discouraging state of affairs for the food faddists to ruminate on. In 1907 the per-capita consumption was 155 lbs., while in 1917 it was 120 lbs. This considerable difference may not mean anything, since all the meat produced is eaten, but it shows wide variations in yearly consumption if not a general trend in any direction.

BULL GORES MAN

JESSE MYERS of near Sykesville, Md., was working in his barnyard recently when his bull, which was also in the yard, attacked him. The bull gored Mr. Myers through the roof of the mouth and trampled the lower part of his body. The report of this accident does not tell the manner of rescue, but states that the victim was rushed to a Baltimore hospital by ambulance and that his condition is serious. Trust in a bull is too often misplaced confidence.

MUSK-OXEN FOR ALASKA

A CENTURY ago musk-oxen in goodly numbers roamed the bleak wastes of northern Alaska. Thanks to explorers, traders and civilization, which has armed the natives with rifles in place of their primitive bows and arrows, the musk-ox is now extinct in that territory. Forty thousand dollars has been appropriated by Congress to bring it back. The first step in this direction is the order, recently placed, of a herd of 30 musk-oxen from Greenland to be delivered to Alaska. They will be used for experimental purposes with a view to domestication. The reindeer business of Alaska has not driven the cattle from our pastures and feed-lots and it is probable that the stockman will face many other problems before he must worry about musk-ox competition. The introduction of the beast, therefore, will have his sympathy, as have the people who need it in their struggle for existence.

POULTRY OUTLOOK

THE official poultry outlook, issued recently, makes no sweeping observations about the industry other than to remind producers that a more orderly program of production would improve their position. Those who go into the chicken business with a rush when prices are high rush out when they are low, and usually get the worst of the bargain going and coming. The outlooks expect both eggs and poultry to be low the rest of the year, but remind us that other things are low and believe when they pick up poultry prices will do likewise. It is thought that farmers are reducing their flocks more than usual at this time of year. A moderate reduction is recommended, but "extreme reduction appears unnecessary." No long-time forecast is attempted, which is perhaps just as well considering the contrary ways of hens and the uncertainties of those who buy or sell them.

PEACH PRICE CONTROL

A REPORT that far western peach growers have signed an agreement to make it possible for the peach control organization to buy and destroy 80,000 tons of peaches shocks the city press. It is doubtful if such measure will be carried out, but it is certain that growers have the right to destroy what they produce if they want to. They will not want to when they learn of the consumers' reaction to such steps, for destruction of food to keep prices high, especially at a time when many persons are unable to buy what they need at lower prices, would not be popular with buyers. But aside from sentiment or any mythical moral obligation

of the farmer to feed the world there is something tangled in the theory of increasing wealth by destroying it. All wealth comes from production. How can it be increased by destroying the results of labor? Just like pulling one's self up by his boot straps.

NO FAVORS ASKED

THE Livestock Advisory Committee is a group representing producers whose purpose or privilege is to tell the country in general and the Farm Board in particular what the livestock business needs. This committee recently made some recommendations, which are, briefly, that the Board inform producers of supply, demand and market requirements, and instruct consumers about meat and livestock prices; that producers, where possible hold cattle until finished, or organize their marketing to match supply and demand and, in the West, reduce breeding flocks of sheep. It also favors modifying the so-called Packers' Consent Decree to permit packers to retail meat. If the committee expects to attract attention it must recommend something more startling. There is nothing in the above to get agitated about, no demands for money or laws, no denunciations of middle or end men, only common sense suggestions, which if carried out might benefit the industry. The effectiveness of remedies for business ills is not measured by the noise their promoters make, otherwise we should be living in Utopia.

GRAPE GROWERS SIGN UP

AFTER a three-month campaign for grower contracts the required 85 per cent of the California grape acreage has been signed up in a new cooperative endeavor under the Federal Farm Board program. Under this arrangement the California Grape Control Board, a corporation with growers and cooperative organizations as members, will have charge of the grape program. Growers will support the Control Board by payment of \$1.50 a ton for fresh grapes. The Board will have authority to decide when and where a surplus of grapes exists and will buy the surplus from growers, at prices it will fix with money advanced by the Farm Board to be repaid out of the funds received from the \$1.50 per ton growers' payment. The surplus will be manufactured into by-products or later marketed through regular channels or left on the vines. Thus the grower in a round-about way will buy his own surplus and let the Control Board dispose of it. California fruit men have tried a variety of marketing schemes, all hailed as successes and ending in surpluses. If this one can overcome the difficulties encountered by the others the latter will not have been in vain, for they will have furnished useful lessons in the school of experience. If prices persist in refusing to be amenable to the latest endeavor something else may come out of the mine. At least we should give the Californians credit for experimenting.

TUBERCULIN TEST

OCCASIONALLY some one hols up with a case to show the inaccuracies of the tuberculin test. In order to give the other side we report a case which shows the accuracy of the test. In four Wisconsin counties where the cattle were tested and all reactors removed three years ago a recent test disclosed only one animal out of a thousand now reacting. Herd owners were in favor of the test and followed instructions to keep the area clean, which is advanced as an explanation of the especially favorable results. The test has stood the test of time. It is not regarded by its advocates as perfect, but as the best we know about. And the trend toward milk regulation makes its application all the more advisable in order to retain the market, if for no other reason.

New Jersey Farm Comment

By G. W. HARRIS

MEMBERS of the New Jersey State Horticultural Society will gather at Glassboro, Gloucester county, on August 5 for their annual summer meeting, tour and exhibit. The day's activities will begin with separate tours for orchardists and vegetable growers. The fruit tour will start from the New Jersey Fruit and Produce Company packing house near Glassboro at 10 a. m., daylight saving time, and the vegetable tour will start from the Swedesboro High School at the same hour.

Those participating in the tour of the orchardists will see stationary spray plants, apple washing machines, cold storage plants, and an over-land irrigation system. Stops will be made at the John Repp Orchard Company, the New Jersey Orchard and Produce Company, and the orchards of Wesley Brown, R. H. Allen, and B. L. Heritage. The tour of the vegetable growers will go through the fertile farming areas of Swedesboro, Mullica Hill, Richwood and other garden spots of Gloucester county. Persons making this trip will see stationary and portable spray equipment, hot-water heated hotbeds, mechanical transplanting machines, and a number of new and promising varieties of vegetables. Stops will be made at the farms of John Rode and Frank Shaw near Swedesboro, S. H. Starkey and Son near Mullica Hill, and of Wade Heritage at Richwood.

ARTIFICIAL watering, if properly applied, will prove a decided advantage to the garden during dry periods, but may prove an injury if not properly done. Frequent light sprinkling of the garden is injurious. The proper method is to soak the soil thoroughly about once each week, preferably during the evening, and then loosen the surface by cultivation as soon as the soil is dry enough to work. No more water should be applied until absolutely necessary; then another soaking should be given. On a small scale water may be applied with a sprinkling can.

"POORLY-GRADED apples are not worth the price of shipping and packing this season, but well-graded fruit may bring a fair price," stated Professor A. J. Farley, of the New Jersey Agricultural Experiment Station.

"The effective marketing of New Jersey apples is greatly handicapped because each grower has his own standards of packing, which may be good, bad, or indifferent, thus the market receives a large volume of poorly-graded apples, which tend to force prices downward on all grades, including the best. Instead of grading with greater care, too many growers rely too much on their nearness to large markets, which is not enough of an advantage to overcome poor methods of packing."

"This season, when the apple crop is large and the prices are low, is an especially good one to try packing in accordance with these grades."

THE average cost of growing tomatoes on 22 New Jersey farms last year was \$216.40 an acre, according to a survey by the State Agricultural Experiment Station.

The average yield sold from all farms was 370.5 twenty-quart crates to the acre. The lowest yield was 205.7 crates and the highest yield was 900 crates.

The average cost of production was 58.4 cents a crate. The variation in production costs ranged all the way from 21 cents a crate on one farm to 94 cents a crate on another. The average price received was 77 cents a crate.

The largest items of cost were: seed and planting, \$17.93 an acre; fertilizer, \$22.53 an acre; and man labor, 69 per cent of which was hired, \$94.09 an acre. Nearly two-thirds of the man labor required was for harvesting. The total number of man hours needed, on an acre basis, was 251.9.

DAIRYMEN whose pastures contain wild plants and weeds should mow them soon. This will kill many plants before they go to seed and also save the strength of the pasture for the more desirable pasture grasses. Some dairymen in Burlington county make this a regular practice in caring for their pasture fields. The quality of the pasture is reflected in milk production and dairymen will profit by mowing them at this time of the year.

IN a period of low prices for eggs the poultryman has particular need to cull low-producing hens, because in such a period fewer hens will pay their way and also earn a profit than in more

prosperous times. Cull hens are frequent visitors at the feed hopper, and the poultryman who markets these loafers as they begin to molt, or who culls his flock closely and systematically, stands a better chance of making a profit from his flock, states the U. S. Department of Agriculture.

THE time of molt is an indication of the ability to lay eggs. Hens that molt before September are usually low producers. Those that do not molt until late in September or October are usually high producers. Hens that molt as late as October or November produce nearly 100 per cent more winter eggs and 50 per cent more eggs for the entire year than hens that molt in July. The poultryman who observes the molt as a guide to culling may turn a liability into an asset by marketing or eating the early molters as they show signs of going off production. These surplus hens may be marketed over a longer period and



The dry weather cut yields of hay in many sections in New Jersey but Frank Matthews of Pittstown has two fine yields of red clover hay. Mr. Matthews attributes his success to the use of commercial fertilizer. He mows a field one year and then plows it. The picture shows Mr. Matthews and his son standing in a field of clover.

usually bring more money than if all the cull hens are sold late in the fall.

Care and management also affect the time of molting. Anything that stops egg production, such as moving the flock from one house to another, or improper feeding, tends to bring on the molt.

Another method of culling the poor layers is to note the physical condition of the birds. A good layer is vigorous in midsummer and has a plump bright comb. The wattles and comb of a poor layer at this time of year are shrunken and comparatively hard, and have a pale or dull color. The color of the legs and beak of a good layer is bleached or faded, whereas both the legs and beak of a hen that has stopped laying begin to show a rich yellow color. In a good layer the pubic bones, which are on each side of the vent, are flexible in any season, but in a poor producer they are thick and rigid. The use of one or both of these methods of culling the flock helps to reduce the feed cost and makes little, if any, difference in the egg production.

NINETY-ONE hens entered in the Egg-Laying Contest conducted by the University of Maryland were lost through the recent heat wave. Production dropped off 9.47 points during the week.

LABELS are a big help in selling farm produce but one thing must be kept in mind, a label will work for the man who grades his produce and consistently puts up a high-grade pack, but it is a warning sign for all to stay away from the man who puts up a poor grade.

The first step in preparing a design for a label is to choose a name for the brand. Many times the producer can find some distinctive feature of his farm, or locality, that he can use for a brand name. Other times he will have to invent a name. The more unique it is the more value it will have. Some types of names were so good that they have been widely copied. There are so many kinds of "maids" on brands that they have lost to some extent their individuality.

A name that can be represented by some kind of a symbol is generally better than one that cannot be pictured so well. For example "Long Pine Brand," could be more easily put on a label than "Valley View Brand."

The simplest design is usually the best. The

simple label can be understood at a glance while the more intricate label will fail to make an impression.

Color plays a large part in the attractiveness of a label. Where more than one color is used there should be contrast, but not a glaring combination. After the label has been designed it is best to protect it in some way. In many states the Department of Agriculture has provisions for registering farm names for a small fee protecting that name from being used by some one else in that state. If further protection is desired the brand name can be copyrighted.

The grower who markets uniformly good produce will find that an attractive label will be of great help in building up a reputation for his goods and a worthwhile aid in selling them.

Inventing a name that has not already been registered is not as easy as one might believe. In Florida and California alone there are thousands of brand names. I have a small collection of labels taken from crates and baskets of fruits and vegetables and some of them are very attractive.

The names are interesting and a few of the more striking follow: "Tip Top," "Stop," "Let 'er Go," "Jazz Brand," "White Mule," "Black Beauty," "Pom Pom," "Cuckoo," "Mammy," "B-Square" and "Alligator."

Essex County Poultrymen

POULTRYMEN of Essex county have been invited by the Essex County Extension Service, cooperating with the Essex County Poultry, Pigeon and Pet Stock Association, to visit the poultry plants at Overbrook Hospital, Cedar Grove, and at the County Penitentiary at Caldwell.

The tour arranged by R. E. Harman of Caldwell is a check-up on results obtained by different methods of rearing young stock and is connected with a three years' campaign which the Extension Service has been carrying on against poultry diseases.

Poultrymen and families are invited to meet at the Overbrook poultry buildings at 6:45 p. m., Thursday, August 7. The tour will get to the Penitentiary at 7:45 p. m.

Supervisor George Taylor of Overbrook and Warden Wm. Ecker of the Penitentiary may be present to say a few words to the poultrymen. L. M. Black, the State Poultry Specialist, will be present also. M. Palladino of Montclair and R. S. Whitmore of Bloomfield, are president and secretary, respectively, of the County Poultry Association. R. E. Harman, County Agent.

THE slump in the potato market is worrying New Jersey growers. Many loading stations in the Central section closed down this week in an effort to maintain prices. Most of the cars rolling were on track and practically none are being loaded now. The price is around \$2 per 150-pound sack f. o. b. Truck loads of south Jersey potatoes are selling in Philadelphia at \$1.75 to \$1.50 per 100-pound sack, compared with \$2.75 to \$3 at this time last year.

Those who are optimistically inclined can see a brighter side to the situation. They believe that the price has now reached the bottom and will advance in the near future. They base their hopes on the fact that the crop in Virginia and Maryland has been fairly well cleaned up and that only around 1,200 cars are left to market. They also believe that the heat wave and drought has damaged late crop potatoes to a considerable degree and that this will affect the market for the New Jersey crop. Reports from Lehigh county, Pennsylvania, state that temperatures rose to 103 degrees and were accompanied by strong dry winds. Drought in New York, Wisconsin and Iowa is said to have cut the crop in those states.

THE old problem was what to do with old razor blades and now we have the added problem of disposing of the Japanese beetles which are caught in traps. The New Jersey Department of Agriculture suggests emptying them into boiling water or kerosene. Odors of decomposed beetles completely counteract the effect of the bait. Although it is not necessary to change the bait more frequently than once a week, it has been learned that a daily stirring of the bait helps materially in maintaining the strength of its beetle-attracting odor.

Community cooperation has been found a big help in lessening the depredations of the beetles. Collingswood, Moorestown and Haddon Heights have combated the beetle with traps and spraying programs.

HE caught his foot, stumbled over the edge of the canoe, and fell flat on his face on the shore, dragging over the canoe and dumping the other man and its contents in the shallow water.

Shain leaped down the bank, and with a river-man's disregard for a wetting, splashed in and dragged out the man in the water, who seemed to be entangled in the dunnage, and was having some difficulty in getting out from under the thwart. When the mayor had dragged him ashore, he was choking helplessly and spitting froth into his gray beard.

The other man still lay on his face, groaning, and Shain left them both, and rescued the dunnage, which was in meal-bags, securely tied at the mouth, the ordinary luggage carryall of the north woods. Then he lifted the canoe up on the beach, and turned just in time to see the elder of the two men stagger up, and still choking with gasps of rage, deal the prostrate one a hearty kick. The other, with a howl of pain, scrambled away like a crab, on hands and knees, and climbed the bank out of reach.

"If I didn't want my cartridges for better game," cried the gray-bearded man, pointing at a rifle lashed under the thwarts of the canoe, "I'd shoot you like a woodchuck! Now get away from here, and don't ever step your foot aboard my canoe again!"

He stooped and wrung the water from his beard, coughed hoarsely, and wheezed.

"That's the second time he's pretty near drowned me," he croaked, turning to Shain. "Twice he's put his foot through the canvas; he's broken the forward thwart three times; he nigh cut his foot off with the camp ax, and I've had him to tend. He hain't paddled enough to keep his blade wet. I haven't dared to run a single rapid 'twixt the Chase and here on account of the lummoos not knowin' enough to sit up straight. And he can't even tote his share on a carry. And if you'll show me in the whole United States a bigger gormikins than that red-headed woodpecker up there," he concluded, brandishing his fists at the cowering man. "I'll eat a porcupine, quills and all."

The man on the bank was young, freckled and much discomposed by this relation of his failings. He rubbed his hand over his bristly red shock, and faltered:

"I've been willin' to learn, Mr. Doody, but I told you to start with that I didn't know much about the woods and—"

"You haven't tried to learn anythin' except to dig spruce-gum and whack it between your jaws!" stormed the old man. "Now you go pick out a good, tall tree, and sit up in it and chew. If you ever get in reach of my clutch I'll wring your neck, so sure's my name's Lud Doody!"

Mr. Doody shouldered his wet meal-sack and started up the bank toward the camp-fire that flickered under the mayor's favorite tree. At his first movement the red-headed youth scuttled off into the woods. When Doody was seated beside the fire, the fugitive made a wide detour, secured his own bag, and went up-stream a little way and sat down disconsolately on a rock.

"WHAT will he do if you don't take him along with you?" inquired Shain, as the elderly man dragged out the soggy contents of his bag growling heavily all the time.

"Don't know or care!" returned Doody, shortly. "A fellow can't walk away from here very well," pursued Shain. "If he could have walked, I reckon I'd have done it long ago."

Doody glanced at him sharply. "You're not so awful fond of your job as mayor of Toban, then?" he inquired, rather satirically.

"They left me here whether I wanted to stay or not," said Shain. "I'd rather have gone along with the crew."

"Course you'd rather go along!" declared Doody. "What young man wants to squat here like a frog on a lily-pod, poking a pick-pole at driftwood? You want to see the world, you do! Ain't that it?" Shain nodded, and his eyes sought the cleft in the cliffs through which the waters of the river went roaring to freedom beyond.

"There'd have been sense in leavin' that land-lubber there," said Doody, scowling in the direction of the figure dimly outlined on the rock. "An ordinary hemlock log knows more than he does, but still he might have strength enough to roll it off those ledges out there. But I'll warrant you're a pretty sly and enterprisin' young man." Again he looked Shain over keenly.

Shain made no reply, and he went on: "I had a good lay to offer to a fellow this spring, and a mighty good lay it is, now I tell you, son, and that particular bunch of red-topped clover over there happened to come along just as I was casting my eye round, and in a moment of temporary insanity I took him in with me. And there he is—no more use than a hunk of fog would be greasin' the bottom of a camp-kettle. Say, young man, what's your name, and where are you from, and who are your folks, and were you ever on the river

The Skokums of the Allegash

By Holman F. Day

Copyright, 1907, by Perry Mason Company, Boston, Mass.

SYNOPSIS

The Mayor of Toban Jaws is the title, given in fun by the rough drivers who direct the stream of logs down the river, to the "runt" of the gang who is left alone all season to watch a ledge and prevent logs piling up there and causing a jam. This job falls to young Shain Seaway on his first trip with the river men. At first very lonesome he learns to like the river and enjoys occasional visitors who use it as a thoroughfare.

before, and what's your general notion of bein' mayor of Toban Jaws?"

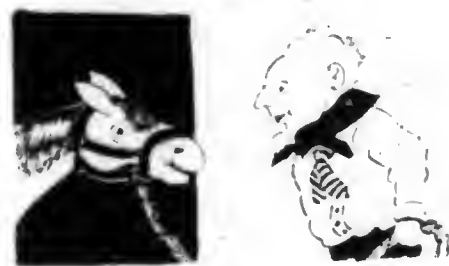
While Shain modestly gave the information, the elderly man set his tin pot on the fire and started the tea to simmering. Then he sliced his bacon and placed his soggy biscuits where they would toast.

"And they are paying you eighteen dollars a month for staying here, making yourself a knot on a log for them!" broke in the man, at last. "Now I'm the kind of chap that doesn't beat around the bush, I've got a proposition. I need a real man, not a wooden figurehead for the front of my canoe. I want a chap that can paddle his end, that knows enough to get in and out without dumping me every time, a chap that can stand by me in a season's operations and not ask too many fool questions to start with, and at the end take his share of a good thing. What say?"

"How much of a good thing is it?" asked Shain, his eyes glistening. "And it's honest, of course?"

"It ain't stealin' and it ain't river-drivin', re-

The Cheerful Plowman



WHEN I want him in the shed, this old horse, the rascal, Ned, wishes then to stay outside where the fields are long and wide. When I say, "Well, Ned, old dear, you have stood too long, I fear, in this shed, so out you go where the winds and zephyrs blow," then he seems to say, "Not I! Lead me out, old fellow, try!"

When I say, "Well, Ned, my lad, here's the bit you've always had, so just open up your mouth, make it wide from north to south, and I'll strap this bridle here to your head, you little dear," then he whispers through his jaws in a tone that busts the laws, "Take that bit? Not on your life! Tell your troubles to your wife, don't come here and say to me, 'I shall drive you over the lea!'"

When I say, "Well, Ned, old plod, many days you've worked and dug, so today stand in your stall, Ned and Duke can do it all; stand and rest your hoofs and face, stay right in your little place!" Then it is he whinnies out with a wild and warbling shout, seems to say, "I want to go with the other nags, you know; it is lonesome here alone, I am not a sloth or drone; get my harness on to me, hook me to the whiffle-tree."

Native stubbornness, I fear, is the fault of many here,—many horses, many men. Time, and time, and time again I have felt the same as Ned with no reason in my head, just a native stubbornness, inborn cussedness, I guess. Often with no reason, none, I've opposed what should be done, knowing mighty, mighty well I was mean beneath the shell. I can't lick old Ned a bit when he fails to take the bit; when he won't go in the shed, for I'm just as mean as Ned! If he should be whipped, old dear, I should be whipped twice, I fear. J. E. T.

(To be continued.)

plied the man, grimly, "and I should say that most any jobs but those ought to hit you favorable."

"But I can't desert my work," objected Shain. "I've been left to watch these ledges, and it wouldn't be a decent trick to go away and let a jam form here."

The man pointed his finger at the red-headed chap, now even more dimly outlined.

"There's your man to leave!" he cried. "He's only good to stand here in the water on one leg like a blue heron, and keep logs movin'. I tell you, son, that if you'll come with me I'll make your fortune for you, if you're worth helpin'. And if you're not, you can't expect it. But I think you're just the chap I've been lookin' for. Hist yet! See here a minute!"

He hurriedly drank the last drop of tea in his cannikin, and went deep into an inside pocket. Out of a tobacco-box he took a pinch of cotton batting, and from the depths of that a little round object, that he placed in Shain's palm with cautious care. The young man stooped to the camp-fire and examined the thing. It glistened prettily with iridescent flashes.

"A pearl!" said Shain.

"I should say it was a pearl, and I've refused two hundred dollars for it. Did you ever hear of fresh-water clams, son, of brooks where the bottom is fairly shingled with clams,—clams that have pearls in 'em, waitin' there for the first lucky man that comes along and scoops 'em onto the shore and opens 'em? I know where such brooks are, son!" His eyes gleamed in the light of the fire as he returned the pearl carefully to the man. "And that ain't all!" Again he thrust his hand into his pocket and brought out something wrapped in a dirty cloth.

The article that he took from this wrapping was new to the experience of the young man. A bit of the tip of a cow's horn had been plugged tightly, and in the larger end were inserted two parallel strips of whalebone. The man turned the strange contrivance about in his hands for a time, and at last clutched the ends of the whalebone strips, one in each hand, and supported the tip of cow's horn on the apex of the triangle thus formed. Seaway noted with interest that the horn tip was heavy for it joggled about peculiarly.

"THERE'S gold and silver in it and some anatomy and lead, and something else that's secret, and mustn't be told of, for 'twould spoil the charm," explained Doody.

"What's it for?" asked Shain, staring at it.

"It's a rod to find treasure with," said Doody in low tones. "You see, I'm taking you into my confidence a good deal, son, but I want you to realize that when you hitch up to me you are gettin' into the biggest thing in your life. I say there's a fortune in following me. Will you go?" He asked the question eagerly.

"But my job!" said the young man.

"Him!" said Doody, brusquely, again shooting his thumb at the dim figure. "He'll have to stay. Didn't they make you mayor of Toban without your wantin' it? Everybody is made mayor of Toban in the same way—they never want to be! That's how 'twill be with him. He's got to stay. It's regular, that way!"

"I'm willin' to give him all the wages that will be comin' to me," said Shain, his heart melting in pity for the unconscious victim afar on the dim rock.

"Will you give him an order on the log-drivin' company?"

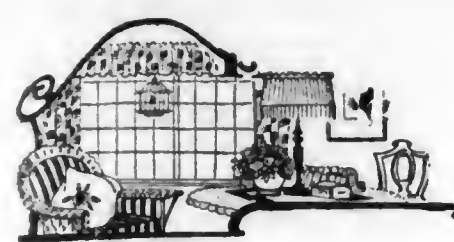
"I'll be glad to."

"Well, then, I'll make him come up here and thank you for your kindness to him!" cried Doody.

It was some time before the red-headed youth could be cajoled into camp. He insisted that this call to a conference was a plot to get him into the clutches of his enemy. And at last, when the thing had been explained to him, he declared stoutly that he would rather be killed and done with than be elected mayor of Toban. The honor failed to attract him in the least.

But when the old man, who cautiously had been stalking him for many minutes, suddenly fell upon him, grabbed him by the collar and jounced him up and down until his teeth rattled, he began to blurt inquiries as to how much the summer's wages would amount to. Half an hour later he had formally taken over the administration of Toban Jaws, and was duly installed in the shack, after having made inventory of the contents of the cache, with increasing satisfaction.

Shain surrendered his abode promptly, for he wanted to sleep in the open that night, in joyous preparation for the other glorious nights of summer when he would sleep in the open under the trees and the stars. He wanted to feel that he was divorced from the lean-to and its responsibilities. Now he thrilling thought!—was one of the wayfarers bound down the great waterway toward adventures not to be guessed and toward a fortune that had been assured.



Can Vegetables Now

EACH year as the time approaches when the garden surplus must be cared for, the home-maker finds herself wondering whether there is any new and easier way to do her canning and yet have as good results as usual. According to the Bureau of Home Economics of the U. S. Department of Agriculture, however, the same principles that have been advocated for the past four or five years are still essential for satisfactory home canning of fruits and vegetables. The most important points might be expressed in a few sentences:

"Two hours from garden to can" to insure fresh, sound products.

Use the "hot pack" when possible so that the material at the center of the can will reach the necessary processing temperatures more quickly. Nonacid vegetables are always more satisfactory if hot packed.

Can nonacid vegetables under steam pressure because they require sterilization at a higher temperature than that of boiling water (212 degrees F.).

Before beginning any canning, it is well to send to the department for Farmers' Bulletin 1471-F, "Canning fruits and vegetables at home," and read it carefully in addition to a clear explanation of the reasons behind the various recommendations made, the bulletin gives time tables for a number of fruits and tomatoes, which may be canned by the water-bath method, and for most common



Canning string beans in steam pressure cooker. Tongs are useful in handling hot jars.

vegetables, for which the steam pressure canner should be used.

The "hot pack" so often mentioned is not a process but a step in filling the containers. The fruit or vegetable to be canned is cooked for a short time (as shown in the tables) and then packed boiling hot into the jars or cans. Some fruits may be packed directly into jars, covered with boiling syrup, and processed for 15 minutes or more, but they shrink and the jars are not entirely filled as they are when the fruit is heated through first and packed hot. Five minutes' processing is enough for many hot-packed fruits.

Why Pressure Canner

The reason why the steam pressure canner is necessary for string beans, peas, corn and other nonacid vegetables is this. The bacteria on these vegetables are very resistant to heat. Though these bacteria might be destroyed by six hours of processing at the temperature of boiling water (212 degrees F.), as in the water-bath canner, in the course of this long-continued boiling the flavor and texture of the vegetable itself is ruined. With the steam pressure canner a temperature of 240 degrees F. can be obtained quickly at ten pounds pressure. At this high temperature bacteria cannot survive long, and the canned vegetables are easily processed to insure against spoilage without overcooking at the same time. In 30 to 60 minutes can be accomplished at 240 degrees F. in the steam pressure canner what would take six hours at 212 degrees F. The pressure canner is a time saver as well as a food saver so far as the processing of all vegetables except tomatoes, pickled beets, or other very acid mixtures are concerned.

Tomatoes are the exception to this rule of vegetable canning. The bacteria that cause greatest difficulty in canning most vegetables do not thrive

The Farm Home



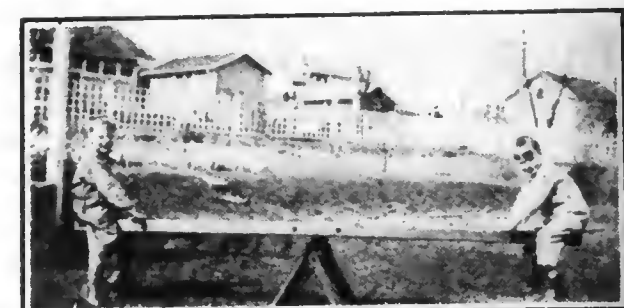
Obedience

By MRS. DORIS MCCRAY

MANY persons speak of a "happy childhood." Mine was not. My memory is of being constantly dominated by parents. They did not let me play with other children. I could not have as good clothes as the others, and had to come home early from parties.

When grown up I still could not do as I pleased. I was dominated by circumstances, by natural laws, by custom and tradition, by my own limited ability, by my desire to excel in certain things which required time and effort. I found I could not wear as good clothes as I wished because I wanted books and magazines also. I liked to come home from parties early, in order to feel good next morning for work. I must learn to play and work with others, in spite of my handicap of not learning to do it naturally while a child.

This all leads me to wonder why parents do not try to show children that nature's laws, civiliza-



Note the home-fashioned seesaw, such as all home yards should have.

tion's laws, determine the child's actions, rather than his obeying "because I tell you to." The child will have more love for a parent who explains that it is the world in which we live which forces obedience, rather than the parent.

Obedience is necessary—obedience to the laws of nature, to the laws of the state and community to customs.

An employer must be obeyed, to a certain extent, or the job is lost. The "big chief" knows he must obey the wishes of a fickle buying public. The children must obey the teacher. The teacher must obey the principal, who obeys the school board, who obey the voters. It is a mild sort of obedience, but each realizes that he is being controlled, finally, by public opinion. There is no such thing as the boss in any business doing precisely as he pleases.

The child who grows up, realizing that he must obey, has good preparation. Yet our great leaders, have been those who cut loose from tradition, who refused to accept old ideas, questioning and investigating.

Obedience, for Safety

We all agree that if a child runs across the road in front of an approaching car, the mother should say, "Come here!" and the child obey instantly. It is not safe to allow the child to argue in an emergency like this.

Yet, if a child is to become a dependable adult who can make his own decisions, we must teach him to depend on his own judgment.

POISON IVY WARNING

SAW in Pennsylvania Farmer an account of method our grandmothers had in avoiding ivy poison.

Fifty years ago my father gave me some ivy to eat and the result was disastrous. My throat, tongue, lips and nose were poisoned terribly, so I was quite ill. A neighbor here tried the same method this summer with the same result.

It may work in some cases, but persons very susceptible had better avoid the treatment.

Clara P. Jackson.

TO KEEP LIQUID YEAST

MY starter would get sour every few months. I would have a poor batch of bread, and have to get starter from some one else. I tried adding scalded hops and peach leaves without much success. Then I was told to pour off the water that gathers on top of the settled mixture. I should do it each time before adding the sugar, salt and flour. Since doing so, I have never needed to have my starter renewed.

Florence C. Hebel.

Preparing the New Pupil

MANY mothers spend considerable time on Johnny's and Mary's clothes for school and think they have done their duty by the little first-grader.

The problem of clothes is not a negligible one since the appropriately dressed child is less likely to suffer from self-consciousness than his over-dressed, or shabbily-dressed schoolmate.

The summer months are kindly months and parents should make the most of them to prepare the child so he can, if possible, present a 100 per cent bill of good health when he enters school.

The undernourished boy and girl, those suffering from infected teeth and tonsils or handicapped in their breathing by obstructing adenoids cannot make the same unhampered start in the classroom that their well classmates do. Lack of progress will tell the story. An examination by the family physician and dentist now will permit corrections to be made, and be over in plenty of time to build him up before school begins.

If a child is not a good "mixer" the companionship of children of his own age should be encouraged. Sand-pile parties, if a beach is not available, offers one of the easiest modes of entertaining children. Frequently a solitary child seeks the companionship of those much younger than himself. While tenderness and carefulness toward infants and toddlers should be encouraged, too much association with the group of the youngest set might well be discouraged since, in many cases, it arises from the child's feeling unable to cope with his own group. When the school bell rings and he is forced to associate with children of his own age he is, for a time, at war with himself and his schoolmates.

Vaccination

While there is a law that all children must be vaccinated to prevent small-pox before they enter school, some states are lax in its enforcement. The conscientious parent, however, does not wait upon the whims of the state when the child's life and his beauty, too, are at stake. Reproachful eyes staring out of a scarred and pitted face is a sight no parent would care to endure.

More than 32,102 cases of this disease were reported in the United States during 1928. These cases result from our failure to make vaccination universal. States which regularly enforce vaccination laws have few cases. States which enforce only in time of epidemics, pay the price.

During an outbreak of smallpox in Los Angeles, California, in 1926, there were 164 deaths from the disease. An analysis of these cases show that one hundred and forty-four of the victims had never been vaccinated, fifteen had been vaccinated over twenty years before and five had been vaccinated only after being exposed. This one epidemic meant a loss to the city of \$500,000 and left sorrow, need and disfiguration for life in its trail.

In ten years, Massachusetts had only 253 cases, while, over a period of eight years, Illinois had more than 50,000 cases. One state requires all school children to be vaccinated the other trusts to luck.

Why, then, delay? If your family physician vaccinated the coming first-grader early this summer that young person will not be hampered at the beginning of a vacation newly made, he stands away from his group during play hours. If he has a certain amount of timidity in his make-up it becomes intensified. If the vaccination takes place now the child is with his or her own pals under the supervision of the parent and the period of inconvenience is passed over as easily as possible.

The vaccination scar is a badge of safety. Let it protect you and yours. And since it will be necessary for the younger set to be vaccinated before entrance to school—for if your state does not demand it, your own sense of duty will don't delay. Do it now!

Dr. R. G. Beachley and Neil C. Westcott.

THE YOUNG PEOPLE

What a Bright-Eyed Boy Saw

By F. C. HEBEL

A BIRD mulberry tree, planted this year, and in a short time the boy saw robins, catbirds, cedar waxwings, song sparrows and others coming for berries. A funny sight was a young robin, stump-tailed but almost as large as its mother, insisting on the mother putting berries into its mouth. A young chipping sparrow had left its nest but sat around on trees for several days "chipping" constantly, lest its mother forget to feed it. It was pecking among its feathers, probably for lice, but its querulous cry came just as fast, accompanied by jerks of its tail.

A chebec, the first noticed here, kept crying its name over and over, causing its whole body to jerk every time. One would have thought it would become exhausted. A pair of Maryland yellowthroats, with their funny little black masks, watched him while picking raspberries. They may have had a nest near, but he could not see it. He flushed a nest of tiny quail. He caught a garter snake. He saw two copperheads sunning themselves, but he went after them with the shotgun.

He picked up a toad and scratched its back and head. It lay on its back in his hand with its feet all folded up and was not ready to leave when he wanted it to. He understands the value of a toad and never harms them. He tries to protect the lady bugs when picking potato bugs, the former being very useful in their quest of plant lice.

Interesting Bugs

He found a bug the size and shape of a lady bug whose back was like pure gold. Later he found larger bugs, yellowish green and iridescent, perfectly lovely when held in the sunlight. A water bug seemed wonderful because it could walk on top of the water or stay down under the water or fly away. In a magazine he saw the picture of a mole cricket and soon after found one. He is anxiously watching for a praying mantis, of which he has read so much.

A neighbor, knowing his interest, called to him the other day to come see a rabbit's nest. Right in the wheat field was a small hole scooped out and lined with fur from the mother's body. There was fur on top. But lifting a bit away, he found eight tiny rabbits. The biggest one was on top and kept jumping around over the others. He left quickly, lest it be frightened so much it jump out of the nest.

Birds' nests, empty, with eggs, or with little birds in them; tiny naked mice, minnows, as well as larger fish. A flock of baby kildeers ran across the road in front of him. A cardinal answered when he mimicked it. He partly filled a jar with water and scooped frog's eggs into it. Now he has a colony of tadpoles.



The photo shows seventy Four-H Club boys who camped for a week just east of Indiana at Camp William Penn. These boys are enrolled in the various Four-H Clubs in Indiana, Westmoreland, Cambria, Clearfield, Jefferson, Elk and Cameron counties. The boys enjoyed a lively recreation program and also some instruction. Swimming twice daily and baseball were very important events.

J. N. W.



The Clover Ridge Four-H Bee Club of Indiana county attending a queen introducing demonstration given by E. J. Anderson, the Bee Extension Specialist at State College. Several times during the year, the Bee Club members hold an automobile tour, visiting the apiaries of each member and holding a number of demonstrations.

One thing he lacks. He should be keeping a diary of these interesting things but he just hates to write.

Editor's note: What have you seen this summer that the other young folks would like to hear about? Write and tell us. Prizes for all the stories published. Address Young People's Editor, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.

Four-H Club Boys' Club

SEVENTY Four-H Club boys from calf clubs, pig clubs, flower clubs, potato clubs, and bee clubs of Indiana, Cambria, Clearfield, Jefferson, Westmoreland, Elk and Cameron counties have just finished a week's camping on Yellow Creek at Camp William Penn near Indiana.

When camp opened one of the first events was a physical examination by Dr. Rink and Bergman assisted by Miss Graffins and Mrs. Bottenhorn all from Indiana. Out of the 69 boys 13 were overweight, 48 underweight and eight exactly normal. Of these, however, only 31 were more than seven per cent underweight or 45 per cent of the farm boys were seriously underweight. This emphasizes the need of more health work in our Four-H Club program.

The program consisted of swimming twice daily, baseball, and other games, as well as an instruction period each morning. C. R. Anderson, Extension Forester at Penn State, took the boys on a trip through the woods for tree identification. Lawrence Madison of State College gave the boys instruction on knot tying and rope splicing. On Thursday a trip was made to places of interest in Indiana.

Short vesper services were conducted on Wednesday and Friday evenings and campfire program was put on each night. The group was divided into three Indian tribes, Apache, Sioux and Mohawk. Each tribe took turns to putting on the campfire pro-

gram which consisted of songs, music, stunts and contests. A track and swimming meet concluded the events of the week on Saturday. This was won by the Apache tribe.

This was the largest Four-H boys' club camp that has been held in Pennsylvania. J. W. Warner, county agent of Indiana county, was in charge, assisted by C. P. Lang and A. B. Bingham, assistant state club leaders of State College, and county agents from the adjoining counties.

When camp broke on Saturday afternoon the most common expression heard was, "Gee, I wish it would last two weeks longer." C. P. Lang.

Too Bad About Ruby

I'M a big boy of ten years old. I live near the town of Downingtown which is on the Lincoln Highway. We live on a three-acre farm with my grandfather and grandmother.

When I was ten years old my daddy gave me two guinea pigs for my birthday, the second of April (I came almost being an April fool baby) and the eighteenth of April the mother pig had a baby and on the twenty-fourth of June she had another baby, so I had two males and two females. I called them Amos and Andy, Madame Queen and Ruby. But here is the sad part of my story, Ruby died! I buried her in a box in the woods.

On this large farm we have a cow, a few chickens and a cat. Also a woods where we have a swing, see-saw and rail house. In this woods there is a spring; in the stream from the spring I sail my boats.

The other day I was playing when I saw two dogs have something in the corner of the fence. The fence being small mesh wire it couldn't get away, so I took an onion crate up and found it was a ground hog. The dogs had it so tired it could hardly move, so I put the onion crate over him and slid the lid in for a bottom and brought him down to the house. Well, when I wasn't watching and after he got rested he managed to get out and ran back to the woods.

I wish all the boys who read the children's page in the Pennsylvania Farmer would come to see me and my guinea pigs.

Richard Aubrey Cummings, Pennsylvania.

Little Folks' Corner



By Barbara Ellen Shoemaker

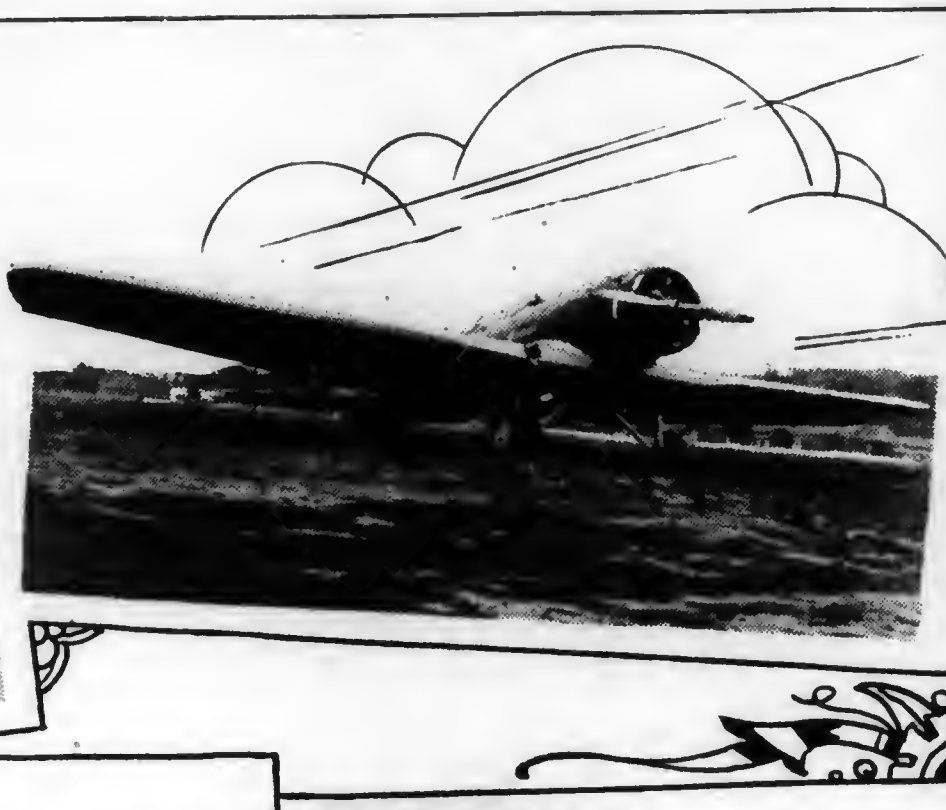
Prizes for the best colorings. Send your letter to Little Folks' Corner, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.

Colored by

Address

Age

PASSING EVENTS IN PICTURES



Upper Left.—The queen's coach found in an ancient Viking ship in Norway. It is 1,000 years old and reveals ancient culture.

Upper Right.—The Boeing Monmail, the largest plane exclusively for the transportation of mail ever built, is powered by a 550 horsepower Hornet engine and carries 2,300 pounds of mail.

Center Left.—J. F. Geller, of the United States Bureau of Standards at Washington, deliberately smashes fine dinner plates to obtain valuable data which is expected to aid in increasing the strength of the articles.

Center Right.—Ruth Kellogg and Catherine Riddle, students of the Chicago Art Institute, find the replica of "Santa Maria," Columbus' ship, an ideal subject to paint.

Lower Left.—Zaro Agha (left) who claims he's 156 years old and carries a Turkish birth certificate to prove it, autographing "A Song for Youth" from "Poems" by Robert Underwood Johnson, former U. S. Ambassador to Italy and not such a young fellow himself.

Lower Right.—Closing day at the tiny school built by President and Mrs. Hoover high among the Blue Ridge mountains for the tiny neighbors of their Rapidan fishing camp.

Photo shows the interior of the school. Mrs. Hoover, at the right, with the teacher, Miss Christine Vest, watching some of the pupils doing their sums on the blackboard.



Insure Your Milk Check

Dry pastures bring small milk checks. Have you noticed that lately? The farmer who has a concrete silo—or better still, two concrete silos—and has filled them with succulent chopped fodder, does not have to worry about dry pastures and short hay crops. He can switch his herd to silage and keep the milk yield at normal and the beef stock growing. If you need a silo, consider building now—there will never be a better time! Send the coupon for free information.

Mail this coupon to office nearest you

Portland Cement Association
1315 Walnut Street
PHILADELPHIA

Please send me your free booklet on Concrete Silos.

Name.....
St. Address (or R. F. D.).....
City.....State.....

PINMEAD-FRANCHESTER GUERNSEY SALE

Wootter - - - Ohio

Friday, August 29, 1930

A Sale You Can't Afford to Miss

45 animals from accredited and negative herds. They include 5 service bulls with show records and 14 females with excellent records or are on test.

Catalog Mailed Upon Request.

The OHIO GUERNSEY BREEDERS ASSOCIATION, Wootter, Ohio

\$185

GUARANTEE

To advertise our business, make new friends and introduce our large stock of diamonds, rubies, emeralds, sapphires, pearls, etc., we have decided to sell our stock at a special price of \$185.00 per carat. This is a rare opportunity for you to acquire fine jewelry at a low price. Write for our catalog and we will send you one free of charge. Catalogs are also available for \$1.00 per copy. Write for your copy today. CHICAGO WATCH & JEWELRY CO., CHICAGO, ILL.

BROILER—RAISERS

SHIPPING CRATES LOANED FREE

SHIP YOUR LIVE BROILERS and other poultry to New York's Oldest Live Poultry House. Est. 1882. We are bonded commission merchants. Birds fed returns made daily. Highest prices. Our outlet is unlimited. Inquire about us. Write for quotations, crates, tags, shipping instructions. Broiler Calendar. Poultry P-2. KRAKOR POULTRY CO., Inc., West Washington Market, New York City.

QUALITY CHICKS

Tancred Str. W. Leg. \$2.00 per 100
Barred Rocks \$2.00 per 100
S. C. Rocks \$2.00 per 100
Heavy Mixed \$2.00 per 100
Light Mixed \$2.00 per 100
500 lots 10¢ less; 1000 lots 15¢ less.
100% live delivery guaranteed. Order from this ad or write for free circular.

C. P. LEISTER, Box P, McAlisterville, Pa.

CHICKS

W. A. LAUVER, Box F, McAlisterville, Pa.

Day Old Chicks—Pullets (Gibson's Large Type) delivered up to 228 eggs. Baby chicks, cockerels and in-week old pullets for sale. Write Gibson's Poultry Farm, Box 15, Versailles, Ohio

Poultry Problems

TURKEYS DIE

I am writing to get a diagnosis of a disease that has developed in my young turkeys. Some of them die for me. On opening them I find the liver has large spots on it like an ulcer, dark brownish in color. The one large blind intestine has hard spots in it that resemble ulcers; the color is reddish and inflamed. The droppings from these turks are watery and of a yellowish color. B. F. Redding, York county, Pa.

THE symptoms you describe are those of blackhead. Unfortunately, the U. S. Department of Agriculture lists blackhead as one of the poultry diseases for which there is no certain cure. The best thing for you to do is to isolate the sick birds from the others, and destroy the worst cases. If you can move the well birds to another lot it may help, as the ground they are now on has undoubtedly become contaminated. Ranging turkeys on ground where there has been no poultry for some time in many cases prevents this disease, but not always, as infection may come from another source, such as a grown turkey or fowl which is a carrier of the disease, or the contamination may be brought in on the feet of the operator from another poultry yard, or in some other way. R. L. S.

NEW HAMPSHIRE REDS

What is the difference between the New Hampshire Red chickens and the Rhode Island Reds? How did they originate? Mrs. R. W. Norton, Bradford county, Pa.

THE New Hampshire Reds are a strain of the true Rhode Island Reds developed by poultrymen in New Hampshire for broiler purposes primarily. They are quick growing, but run more to a yellow or buff color than the original Reds. R. L. S.

TO PREVENT WORMS

Our 250 pullets have made very good growth with no apparent trouble from disease or parasites. But they have ranged on ground used a little by old hens this year. Would you advise using the worm capsules as a precaution? What precautions should I take to keep these pullets from an early molt this fall? They are three months old, having been hatched April 3rd. Harford Co., Md. C. E. Richardson.

I MAKE it a practice to give pullets a worm capsule when housing them for the winter, which I consider a very good thing to do, as some worms are present in every flock, no matter how good the appearance of the birds may be. In order to ward off early molting, give these birds morning lights in the fall, feed plenty of grain at the night feeding in order to keep up good body weight, and avoid any changes of feed or management once they are housed. R. L. S.

SYMPTOMS OF CHOLERA

We have been having trouble with our chickens. Each summer many of the hens get a diarrhea and quite a number die. Recently some of the hens became lame, later the combs became black and they finally died. Somerset county, Pa. R. C. King.

DIARRHEA, purplish comb and heavy mortality are symptoms of cholera. In this disease the skin may also be reddish, with signs of congestion and hemorrhage in the body cavity, enlarged liver and congested lungs. In treating this disease, for which there is no cure, remove the sick birds from the flock, plow or spade the lots deep, clean the poultry houses thoroughly, and spray with some good disinfectant. Use permanganate of potash in the drinking water, in sufficient quantity to give it a wine color, which will help to prevent the spread of the disease through the drinking water.

It may be also that your birds are suffering from so-called "summer poisoning" which comes from eating decaying animal matter or spoiled meat scrap. Very often a hen dies in an out of the way place and the others eat the decaying body. The remedy is to remove the cause and to give the flock a physic of one pound of Epsom salts per 100 birds in the drinking water. R. L. S.

KLIN'S BARRED ROCK CHICKS

Pennsylvania State College Strain: None better. Fully Guaranteed. Poultry Free from All Faults or C.O.D. Prompt delivery. S. W. KLINE, Box 20, Middlebrook, Pa.

CHICKS

PURE BRED CASH OR C.O.D. Barred Rocks—S. C. \$1.00 per 100. Heavy Mixed \$1.00 per 100. 100% guaranteed. TWIN K. CHERRY, McAlisterville, Pa.

All Voted for NICOTINE AND KAMALA



Worms Have No Chance

Read what state colleges say about poultry vermifuge. Two ingredients head the list everywhere. Nicotine for large round worms and Kamala for tape worms. Worms haven't a chance if a proper dose of these fresh ingredients is given to chickens or turkeys. That's where Pratt's help. We put these fresh, powerful drugs in airtight, insoluble coating that keeps them fresh. Easy to handle. Effective. Quick results. Get a supply at your dealer's or by mail.

Pratt's N-K (NICOTINE-KAMALA) TABLETS

Guaranteed "Satisfaction or your money back"

SEE YOUR DEALER IF HE CAN'T SUPPLY YOU, ORDER BY MAIL. Enclose money order or stamps, indicating the size and quantity desired. We pay postage. Adult Size: 50.....\$1.00 100.....\$1.75 250.....\$3.00 500.....\$5.00 1000.....\$8.00 Pratt Food Co., 1414 Walnut Street Philadelphia, Pa.

The Easy Way to Kill Lice on Poultry

No matter how big the flock or how many, only a small paintbrush, a can of "Black Leaf 40" and a few minutes time for "painting" the top of the roosts are required to rid an entire flock of body lice. Do away with old laborious and disagreeable methods of dusting, dipping and creosoting!

Just Paint the Roosts with "Black Leaf 40" About a half hour before fowls perch, "paint" "Black Leaf 40" on top of roosts. When fowls perch upon roosts that have been so "painted," fumes are slowly released that permeate the feathers, killing the lice. The treatment is so easy, effective and cheap that poultry owners need never be bothered by lice on their flocks. Think of the time, labor and expense that this method saves! There is no individual handling of fowls. "Black Leaf 40" is sold by poultry supply stores. \$1.25 also treats 100 feet of roost. Ask your dealer or write us. Tobacco Products & Chemical Corp., Incorporated, Louisville, Ky.

"Black Leaf 40" WORKS WHILE CHICKENS ROOST

The NEW GEHL Low Speed SILO FILLER

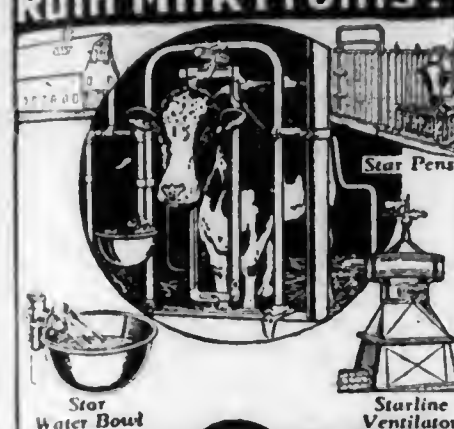
Lightest running, cleanest cutting silo filler made. With 25 different makes of GEHL bodies 40% of all silos in Wisconsin. A new value for your money. GEHL silos are built with the best material and by-wheel, self-cleaning, fine proof, gears running in oil; improved ball-bearing drive and play. Will stand the test.

Cuts and Throws More Corn at 500 r. p. m.

A SAFE speed using only 5 h. p. motor cuts power costs to as low as \$1.25 per ton.

Also, fast year-round silage and a many other features. Catalog upon request. Also name of nearest dealer. Write today. GEHL BROS., MFG. CO., 428 South Water St., West Bend, Wis.

Why Let Hard Luck Ruin Milk Profits?



STARLINE Barn Equipment SAVES TIME SAVES FEED

Prevents Diseases and Accidents—With More Milk From Your Cows

THOUSANDS of farmers have converted their barns into real profit-makers with STARLINE equipment. You can do the same. Send for

THIS FREE BOOK of 270 pages which tells you all about the special features of STAR Stalls, Stanchions, Penn Ventilators, Water Boats, Salt Cans, and Carriers. It's worth many dollars each year to you.

Hunt-Helm-Ferris & Co., Inc. Dept. P-5

Please send big 270-page book. Expect to

Build Ventilator Equip. for Cows

Remodel Equip. for Cows

Send me to check over my barn and see how much work, worry and expense can be saved.

Name.....

Address.....

Linabestos + A Hose = Sanitation

The new milk bill calls for absolute sanitation wherever milk is handled. To those farmers and dairymen who use Ambler Linabestos, all of the stringent requirements are easily met.

With this remarkable wall and ceiling sheet material, you have no fear of using water.

Linabestos is also fireproof, weatherproof, rat proof and bug proof.

Its hard, long wearing surface is equally ideal for exteriors. It is easily worked, and makes a more sanitary and more economical installation.

Write today for complete free catalogue. Ambler Asbestos Shingle & Sheathing Company, Ambler, Pa.; branch offices: 311 Ross St., Pittsburgh; 54 West Market St., Wilkes-Barre; 1001 Liberty Trust Bldg., Philadelphia.

AMBLER ASBESTOS PRODUCTS

Do You Bottle Milk?

Are You Equipped To Bottle and Cap?

If not, you are necessarily interested to know about the MECO AUTO-MATIC BOTTLER AND CAPPER.

Bottling capacity up to 500 qts. per hour. Easily cleaned and sterilized and carries the fullest approval of the Sanitary Board.

Automatically bottles and caps and is cheaper than a hand operated machine. See the MECO AUTO-MATIC BOTTLER AND CAPPER in operation before you buy. No obligations. Write for demonstration.

MODERN EQUIPMENT CO., GREENSBURG, PA.

See you saw this advertisement in Pennsylvania Farmer when you are writing to our advertisers

Wheat for Livestock

By L. W. LIGHTY

OF late wheat prices have ranged about 70c and corn prices around 90c a bushel. Farmers promptly started feeding wheat to hogs and some other livestock. This is a wise procedure. There is a surplus of wheat and a scarcity of corn, therefore if the wheat takes the place of corn feed it.

Experiments indicate that hogs gain as rapidly on wheat as on corn. At the Missouri Experiment Station it took 483 pounds of wheat to make a hundred pounds of pork as compared with 582 pounds of corn. A saving of 20 per cent on quantity of feed and as much on the price of the feed is surely worth considering. Adding six pounds of tankage to the bushel of wheat reduced the cost still more.

Our swine and poultry will consume a lot of wheat and bring us more cash in the end than we will have if we sell the wheat on the present overstocked market.

Sixty or more millions of bushels of wheat held by the Farm Board surely is a great depressing factor on wheat prices and an enormous cost to the holders. Why not feed the wheat that is not needed as human food? Turn it into swine and poultry feed and sell it as such to the feed buyers of the country and put that price menace of existence.

We may not approve the government being in business, but if they get into it they should show as good business capacity as the average farmer.

When to Cut Soy Beans

After the soy beans have fully made their seed they shed most of the leaves and we lose much on the hay, but if we cut the crop when the pods are about or nearly half grown the leaves are still intact and we get the most feed and possibly the best feed from the crop. Rake up as soon as completely wilted and cure in the windrow or better largely in the shock. A tall comparatively narrow shock will cure rapidly and shed the water of the showers and make a very excellent hay.

I Buy Some Mutton

I am a lover of mutton or lamb, but for some time it seemed not easy to procure and the prices were high, so I did not eat any. On being informed by the editor that sheep were sold at 5c a pound I ordered a leg of mutton. The bill came and it was 35c a pound; I learned the more popular cuts were 55c a pound. Seemingly our butchers know nothing about 5c sheep. Neither do they know about 7c cattle or 10c veals, by the prices they ask for the meat. Reducing retail prices seems like pulling teeth—they slay off to the last minute.

Brown Pastures and Wilted Corn

Over a large territory the earth is dry and the temperature unusually high. Pastures become short and the feed hard, so the grain ration must be resorted to if the milk flow is to be kept up, and it never pays to allow it to drop at this season. Unless rain comes soon the corn crop will suffer seriously: in fact the early corn on the higher soils is ruined now, as the tassels are scorched and it fails to yield pollen. The lower lands and the late plantings are still in shape to be benefited by rain.

Bad Effects of Thick Planting.

Too many plants in the corn field act like weeds in the same. Fields that have a stand of one plant in sixteen inches with rows four feet apart look much better now, that the soil is very dry, than the fields which have twice as many plants, and the chances for a crop in the former are double those of the thick plantings. Usually we can adjust our plates so as to plant correctly, but variety of corn makes a difference and we are liable to get too much corn in the soil.

A UNADILLA SILO will boost your milk profits all next winter!

Stored safely away in a Unadilla Silo your corn will be the juiciest, most palatable and nutritious green feed possible to provide in winter. Appetizing feed which will increase milk flow and profits and save cost of dry feeds.

If you are facing a short hay crop make the most of your corn crop by harvesting it into a Unadilla. Your stock will appreciate and respond generously to the change.



Write at once for large illustrated catalog and prices. Shipment of any size Unadilla can be made at once in either Oregon Fir or Spruce. Liberal cash discount for cash on delivery. Time payments also. Address, UNADILLA SILO CO., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Unadilla Silo Co., Inc., Box P, Unadilla, N.Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

Your Silo—Ready to Ship At Once

24-hour service. Send in your order today—it's shipped tomorrow; it can be erected, ready to fill within ten days, generally. Our factory has been enlarged and newly equipped—and is on a 24-hour schedule. No waiting. There's still time to send for our representative; there's no time for delay. Corn MUST be ensiled this year if the dairyman makes any profit this season.

Write, Phone or Wire

THE CRANE LINE

90 Grant St., Norwich, N. Y.

Write, Phone or Wire

THE CRANE LINE

Farmer's Business Letter

ALTHOUGH cattle prices gained on light supplies, the undertone shows little improvement. The July average price at Chicago at \$9.50 stands only 30c above the lowest for that month since 1914, barring 1921 when the July average sank to \$8.10. A year ago cattle averaged \$14.85 and two years ago, \$15.

The low level of prices is causing many of the big producers in the West to make arrangements to carry their stock over for later fall and winter markets. Drouth, however, is forcing some off the range earlier than usual. Cattle feeders throughout the Middle West curtailed shipments to markets during the past week, making a tremendous effort to check the break. Arrivals at principal points were among the smallest on record in recent years. Chicago receipts for the week were the smallest for normal times since April, 1916.

The Hog Market

The hog market is still "jumpy," but prices were not quite so erratic as during the preceding week. Buyers are endeavoring to force top quotations below \$9.50, but as soon as choice kinds can be had at this level, there is a marked increase in orders and values soar toward \$10 again. Top prices advanced from \$9.25 at the close of last week to \$9.50 Monday and reached \$9.85 in mid-week, which was within 15c of the highest point of the month. Demand at this figure narrowed abruptly and much of the gain was erased Thursday.

Although hog prices have been unusually erratic for several weeks, the market has held up much better than the markets for cattle and lambs. The month's receipts at \$66,579 compare with \$66,308 a year ago, but few other July totals were larger in recent years. The general average price for the month at \$8.80 stands lowest for July since 1924. Hogs a year ago averaged \$11.30 and two years ago \$10.70.

Lambs Lower

Lamb prices entered new low levels during the past week. The general average for the month of July at \$9.75 goes back to 1915 for a lower July average and compares with \$14.45 a year ago and with \$15.60 two years ago. July averages during the last seven years range from \$13.85 to \$15.60, indicating the low level of present prices. Packers are still insisting on the heavy sorts enforced a week ago, taking out all buck lambs, regardless of weight, at \$1 or more discount, according to quality and weight. Strong weight culls are selling \$2.75 to \$3.25 below the top end and inferior thin throwouts get a discount of \$4.50 to \$5. Only a few head of choice ewe and wether native lambs reached \$9.15, the top in this class, while bulk of closely sorted kinds sold at \$8.50 to \$9.25 during the week, with most buck lambs at \$7.50 to \$8.

Thousands of feeding lambs were dumped on the market and many were forced into packing houses due to the narrow country demand. Nearly 2,000 sold at \$5.65 to \$5.50 during the week, although bulk of better grades brought \$6.25 to \$6.50, with best selections at \$6.65. The unsatisfactory outlet for feeders on the cash trade caused buyers to lower bids on the futures trade. Medium wool mountain lambs for August and September delivery were bid \$6.25 to \$6.50 at the close, these contracts calling for 57 to 65 pound averages.

Drouth Affects Prices

What is termed by leading statisticians as the worst drouth in years brought on a wild buying wave in the corn market during the week. This same dry spell, which is estimated to be reducing the prospective yield at the rate of 25,000,000 to 30,000,000 bushels per day, has forced prices up 16c during the past month. Last Thursday's prices registered a 3c gain.

The condition of the corn crop in some sections of the country borders on a near calamity, according to many reports coming on the market. The E. H. Miller-J. E. Bennett & Co. report places the yield at 2,495,000,000 bushels. It is the smallest crop with five exceptions in over 30 years. Only twice since 1898 has the condition of the crop been lower, according to the report. This report showed a reduction of 400,000,000 bushels from a month ago. Most statisticians claim that it is almost impossible to estimate the crop, because of the damage done daily by the record heat.

Owing to the continued drouth, traders expect a series of erratic corn markets, with gains outnumbering

losses in prices during the next few weeks. Sentiment in the wheat market changed to the bull side when large export orders arrived. One estimate placed the wheat crop for the United States at 808,000,000 bushels, which was practically the same as a month ago and slightly less than the trade expected. The same report placed the oats crop at 1,279,000,000 bushels, or 70,000,000 bushels in excess of last year, a drop of 50,000,000 bushels from a month ago.

Chicago, Aug. 2, 1930 Watson

Produce Market Review

THE Philadelphia egg market during the past week was irregular both as to price and quality. Eggs of fine quality were scarce and sold readily. The receipts had no difficulty in securing fairly large premiums for eggs suitable for critical trade channels. The average offerings were badly heated, shrunken and in generally poor condition. The loss was very heavy and some lots had to be recalled before selling. Some sales of the poorer quality stock were reported as low as 15c, while fine graded nearby whites brought as high as 32c.

The prolonged hot weather and drouth has curtailed production in many sections and with fairly liberal withdrawals from the cold storage the market has developed a more confident tone.

The New York egg market advanced sharply this past week and prices on the finest white eggs closed about 7c higher. Brown eggs and mixed colors advanced around 2 to 2 1/2c. Receipts of pullet eggs from the nearby sections increased materially. Late in the week nearby white eggs ranged from 27c per dozen to 43c, browns from 26 to 33c and mixed colors from 16 to 31c.

Butter and Poultry
The butter market fluctuated con-

siderably during the early part of the week but closed steady in most eastern markets. Ninety-two score was quoted at 37c a pound in New York at the close of the week.

Receipts of broilers and fowl from nearby sections were generally light on the New York market during the week. Fowls were somewhat weaker and prices declined but the market was steady at the close. Broilers held steady throughout the week. Sunday was a Jewish fast day and that had considerable effect on the demand.

Leghorns were quoted at 15 to 16c per pound while colored fowl brought 20 to 22c. Rock broilers sold at 25 to 33c, Reds at 20 to 26c and Leghorns at 15 to 25c. Receipts of dressed poultry were light and the demand slow. Nearby broilers sold at 25 to 35c per pound while ducks brought 18c.

Potatoes and Apples
The Eastern potato markets were dull during the past week and prices declined somewhat. The New Jersey crop is ready to move and while some crop has been shipped the real active movement has not yet begun. Prices broke sharply at New Jersey points and operators curtailed shipments in an effort to hold up the market. New Jersey Cobblers sold around \$1.50 per 100-pound sack during the past week in Philadelphia and at \$2 to \$2.25 per 150-pound sack in New York.

The apple market continues quiet with a fair demand for fancy large stock. At present the market in Philadelphia is relatively higher than in New York. The heavy receipts of ordinary and ungraded stock have had a depressing effect on the market. There are but few apples bringing \$1 or over per bushel in Philadelphia and most of the stock has ranged from 25 to 75c. Some fancy 3-inch Starr sold at \$1.25. Chain store buyers report that the consumers are not buying apples freely and that it takes them a long time to work them out.

Tomatoes
The tomato market improved at the close of the week due to lighter receipts and to an improvement in the quality of many offerings. Most of the stock arriving is of second early va-

rieties such as Marglobe and the opening of the canning season has diverted considerable stock from Philadelphia. The best tomatoes ranged from 50 to 60c per bushel.

The truck receipt report issued in Philadelphia shows that receipts of Pennsylvania produce are increasing. Corn, tomatoes, bunches of vegetables, potatoes and apples are arriving. On day last week the truck receipts of potatoes were equivalent to 20 carloads.

W. R. W.

Produce Market Quotations

PHILADELPHIA
Butter—Higher than extras, 39 to 42c; 90 score, 35c; 28c; extras, 34 to 35c; extra first, 28c; firsts, 24 to 25c; seconds, 19 to 20c.
Eggs—Fancy select, 33 to 35c; extra first, 28c; firsts, 24 to 25c; seconds, 19 to 20c.
Fruit—Apples, N. J., 1/2 bushels, 15 to 20c; old roosters, 15 to 18c; pigeons, 15 to 20c; ducks, 15 to 20c; turkeys, 16 to 25c.
Poultry—Leghorns, N. J., 1/2 bushels, 15 to 20c; old roosters, 15 to 18c; pigeons, 15 to 20c; ducks, 15 to 20c; turkeys, 16 to 25c.
Fruit—Apples, N. J., 1/2 bushels, 15 to 20c; old roosters, 15 to 18c; pigeons, 15 to 20c; ducks, 15 to 20c; turkeys, 16 to 25c.
Poultry—Leghorns, N. J., 1/2 bushels, 15 to 20c; old roosters, 15 to 18c; pigeons, 15 to 20c; ducks, 15 to 20c; turkeys, 16 to 25c.

YORK
Butter—Country, 40c; separator, 45 to 50c; Eggs—Fresh, 26 to 30c.
Poultry—Hens, 20 to 25c; springers, 25 to 35c; dressed hens, 11 to 12c; springers dressed, 11 to 12c.
Fruit—Apples, 8 to 15c 1/2 pk; 75c to \$1.50 per bu. RASPBERRIES, 15c to 20c; BLACKBERRIES, 15 to 18c; PEARS, 10c to 15c 1/2 pk.
POTATOES, 8 to 10c 1/2 pk; CELERY, 5 to 10c bunch; LETTUCE, 10 to 15c; CARROTS, 5c bunch; BEETS, 3c bunch; CAULIFLOWER, 10 to 15c head; SPINACH, 15c 1/2 pk; BEANS, (stringless), 15 to 18c 1/2 pk; LIMA BEANS, 15 to 20c pk; TOMATOES, 10 to 14c; PEPPERS, 2 to 4c; PICKLES, 12 to 15c doz; 75c to 90c per 100.

LANCASTER
Butter—Country butter, 45 to 50c; creamery butter, 44 to 50c.
Eggs—Fresh, 26 to 30c.
Dressed poultry—Chickens, 11 to 12c; ducks, 15 to 20c; turkeys, 16 to 25c.
Fruit—Apples, 8 to 15c 1/2 pk; 75c to \$1.50 per bu. RASPBERRIES, 15c to 20c; BLACKBERRIES, 15 to 18c; PEARS, 10c to 15c 1/2 pk.
POTATOES, 8 to 10c 1/2 pk; CELERY, 5 to 10c bunch; LETTUCE, 10 to 15c; CARROTS, 5c bunch; BEETS, 3c bunch; CAULIFLOWER, 10 to 15c head; SPINACH, 15c 1/2 pk; BEANS, (stringless), 15 to 18c 1/2 pk; LIMA BEANS, 15 to 20c pk; TOMATOES, 10 to 14c; PEPPERS, 2 to 4c; PICKLES, 12 to 15c doz; 75c to 90c per 100.

PITTSBURGH
Butter—Nearby tubs, 82 score extra, 38c; standard, 37 1/2c; 82 score, 36 1/2c; 82 score, 34 1/2c. Prints 1c higher.
Eggs—Fancy firsts, second-hand cases, 23 to 24c; extra firsts, new cases, 25 to 26c; nearby henmy whites, 28 to 30c.
Poultry—Live hens, heavy, 20c; medium, 18 to 19c; colored springers, 15 to 20c; Leghorns, 18 to 20c; old roosters, 12c; old geese, 8 to 10c; spring geese, 15c; ducks, 15 to 18c; pigeons, 35 to 40c per pair; turkeys, 20 to 25c.

CHICAGO CASH GRAIN
Chicago, Ill., Aug. 4.—The following cash prices ruled here today: No. 1 hard wheat, 84 to 86c; No. 2, yellow corn, 90 to 91c; No. 2 white corn, 91 to 92c; No. 2 mixed corn, 90 to 91c; No. 2 white oats, 37 to 38c; No. 2 rye, 60 to 61 1/2c.

WOOL MARKET
Boston, Aug. 2.—The wool market was decidedly more active during the past week than at any time during the earlier part of July, says the U. S. Department of Agriculture Market News Service.

Prices had been very firm for several weeks during which the large manufacturers were out of the market except for small quantities needed to piece out stocks to cover immediate requirements. Early in the past week a growing interest in current offerings became apparent and after the first two days of trading, sales began to be closed on moderate quantities which in the aggregate totaled up to a fairly large volume. Interest was quite strongly centered on the 64s and finer qualities but the lower grades were by no means neglected.

Strictly fine combing is quoted at 31c, clothing 28 to 29c, half-blood combing 26 to 27c, clothing 25 to 26c, three-eighths combing 24 to 25c, clothing 23 to 24c, quarter combing 22 to 23c, clothing 21 to 22c, half-blood combing 20 to 21c, clothing 19 to 20c, quarter combing 18 to 19c, clothing 17 to 18c, half-blood combing 16 to 17c, clothing 15 to 16c, quarter combing 14 to 15c, clothing 13 to 14c, half-blood combing 12 to 13c, clothing 11 to 12c, quarter combing 10 to 11c, clothing 9 to 10c, half-blood combing 8 to 9c, clothing 7 to 8c, quarter combing 6 to 7c, clothing 5 to 6c, half-blood combing 4 to 5c, clothing 3 to 4c, quarter combing 2 to 3c, clothing 1 to 2c, half-blood combing 0 to 1c, clothing 0 to 1c, quarter combing 0 to 1c.

CHICAGO CATTLE
Chicago, Aug. 4.—Today's receipts amounted to 13,000 head. The market was steady to a quarter higher. Last week the bulk of steers sold at \$8.50 to \$10.15.

About 30,000 hogs, including 14,000 "directs," were on sale. The market was 10 to 25c higher with top at \$9.95 and bulk at \$8.90 to \$9.70.

Sheep
Eight thousand sheep and lambs made up the supply. The market was 25c higher. Good native lambs brought \$9 to \$9.50, buck lambs \$8 to \$8.25.

350 COWS 350

T. B. and Blood Tested
I have for sale 350 cows in my Ayrshire herd. These cows are T. B. and blood tested to go anywhere. WISCONSIN DAIRY CATTLE MARKET
Trevor, Wis.—On See Line
6 Miles S. W. of Milwaukee, 50 miles N. W. Chicago.

SWINE

LARGE BERKSHIRES All ages of both sexes for sale. Dills & German, Rossville, Ohio

BIG TYPE, pedigreed Chester Whites from top breeders and big blood. Priced right and shipped on approval. C. E. Cassel, Hershey, Pa.

Chester White May Pigs Big type, 60 lbs., by State fair prize four, \$12.00 each, registered, 100 lbs. M. E. Bauman & Son, Thurman, Ohio

Chester White Pigs Big type, 60 lbs., by State fair prize four, \$12.00 each, registered, 100 lbs. M. E. Bauman & Son, Thurman, Ohio

BIG TYPE POLANDS, 2 and 4 months old, 6 to 8 lbs. HALL, Farmdale, Ohio

Swine Pigs, 15 to 50 lbs., \$1.50 to \$2.00 each. Truck delivery, cash or terms. Stanley Short, Cheswold, Del.

DAIRY CATTLE

5 JERSEY BULL CALVES 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

NANTERMIN JERSEY BULL CALVES FINANCIALS 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

SWISS ALPS, 1 to 2 months. Excellent type. Sullied straight backs, long and deep bodied. All registered of Merit dams and sired by good bulls of old Sullied lineage. Priced at \$50.00. Quick sale. Federal Accredited Herd and registered. Highland Farms, Oressburg, Pa.

Farm Conditions

Blair Co., Central Pa.
July 29: Hot and dry. We have had very little rain for some time and the mercury stays around 90 to 100 degrees most of the time. A good wheat crop but no market. 75c a bushel at present and no signs of improvement.

Dairy cattle not doing so well on account of short pasture and flies. Corn and potatoes also drying up. H. E. Hetrick.

Somerset Co., Southern Pa.
July 29: Weather hot and dry. A light shower now and then only cools the air. Hay short and thin, 15 to 20 acres gives from four to eight loads. Oats looking good. A good bit of small. Potato vines looking good, but cannot tell until crop is harvested. Corn in tassels. Some berries. State inspection in Somerset county by creameries is being done now. Prices of farm products way down except hay. A good bit of summer flu. Children getting ready for school which will open first Monday in September. Mrs. Harry Brant.

Cumberland Co., Southern Pa.
July 29: A piece of dry and extremely hot weather, registered as high as 105 degrees some days. Vegetation is suffering very much. Harvest is about over, some oats out yet. Wheat was good. Hay not so good. Oats short and corn is suffering. Apple crop very light. Potatoes suffering from blight. Pastures burnt up. Some plowing being done. Some wheat threshed. No market for it. J. Brown Kelley.

Lebanon Co., S. E. Pa.
July 29: It is very hot—100 degrees—and dry. Drouth has helped wheat harvesting. Most wheat threshed. No market for it. Some dealers pay 75c bu. Oats ripening. Some may be light because of dry spell. Potatoes at a standstill. Corn withering. All pasture drying up. Second crop alfalfa being made. Harvest hands turned away, too plentiful. All kinds of cherries a good crop. Apples, peaches and other tree crops look good. Robert L. Weigley.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

Marshall Co., Northern W. Va.
July 29: Weather very dry. Mercury 98 to 101 degrees in the shade. Pastures dried up. Corn crops suffering from the drouth. Hay and oats very light. Wheat crop short.

CLASSIFIED DEPARTMENT

12c a word - - per insertion
Minimum charge \$1.20
10c per word per insertion when 4 or more consecutive insertions of the same copy are used.

Advertisements in these columns cover farms for sale or wanted, help or situations wanted, pets, hay, seeds, honey, used implements and machinery, in fact anything that the farmer wishes to buy, sell or exchange.

Notes on Canada

A CROSS the Bay of Fundy in a fog so thick one could not see a porpoise roll—if there are porpoises in Fundy—four hours by fast steamer from Digby, N. S., brings us to St. John (pronounced 'John', with the accent on the John), center of commercial life of New Brunswick. The size and equipment of the harbor arrests our attention. We are informed that the harbor never freezes which makes St. John a year-round port. Here the salmon fisherman spreads his nets, the round buoys or bobbies which hold them upright looking like strings of beads on the mist-covered water.

Mills, factories and machine shops give the town an industrial appearance. However, it is not an unsightly city, thanks to early builders and present citizens. When Paul Bedell laid out the city in 1784 he provided for a number of open spaces which have been beautified and are highly prized by the people of St. John. One of these, King Square, across the street from the hotel where we stayed, is really a 17-acre flower garden with an abundance of trees, shrubs and flowers one would expect to meet only in tropical regions. Members of our party who know about such things proclaimed that the masses of azaleas in bloom surpassed in size and brilliance of coloring any they had seen elsewhere. In fact the women in our group were constantly enraptured by the colors of the flowers throughout Canada. What we liked best about this garden was the miniature schooner gracefully sailing around a swan and duck-bedecked pool, and but for our advancing years and assumed dignity we should have challenged any urchin of St. John to a toy sail-boat race.

The Bay of Fundy is widely famed as the place where the tide rises higher than at any other place on the globe. This freakish performance occurs near St. John at what is known as the "reversing falls." The high tide squeezing through a 450-foot gorge piles up 26 feet high. On going out it takes the same course, for there is no other, and the "falls" reverse.

FROM St. John we went to Fredericton, capital of the province, an attractive town which nestles among its stately old trees by the side of the river. It has the distinction of being the smallest capital city in Canada in respect to population, and the largest in respect to area. It comprises only about ten thousand people but the city limits includes within their boundaries a total of twenty-seven square miles.

THE Eastern Townships, a portion of Quebec west of Maine, is a fertile, pastoral region largely settled by English-speaking people. Mixed farming prevails and the region is an attraction for city folks who spend their holidays among its lakes and hills. The density of population increases as we approach the St. Lawrence and the city of Montreal.

MONTREAL is the metropolis of Canada. It has a population of over a million, including more Frenchmen than found in any city outside of Paris. It is a banking and business center and although situated a thousand miles from the sea is the second largest port on the North American continent. Like New York it is on an island. Its industries produce over a half billion dollars worth a year; it ships over two hundred million bushels of grain annually and has the largest seaport elevator in the world with a capacity of four million bushels. Features of interest in Montreal are too numerous even to mention, but we must not forget the shrine of St. Joseph, where the lame and the trouble-laden painfully mount its 99 steps on their knees, stopping to repeat a prayer on each step.

M. C. G.

YOU CAN'T TAKE CHANCES AT HARVEST TIME

WHEN every minute counts--when every man on the place is working to the limit--the slightest trouble with a tractor is too much trouble!

It's not enough to check over your tractor before the big rush begins--unless you make sure that it stays in the pink of condition. The best way to make sure of that is to be sure of the gas and oil you'll use.

If you pin your faith to ORANGE AMERICAN GAS and AMOCO MOTOR OIL--there'll be no let down on the score of fuel and lubrication. Your motor will be hitting as well at the end of a long, grinding day as it was in the dewy morning!

Give your tractor a chance to show its best this harvest time!



Stop at any AMOCO dealer, call our nearest branch or write direct for further information.

The AMERICAN OIL COMPANY
Affiliated with Pan American Petroleum & Transport Company
General Offices: American Building, Baltimore, Md.

Seeds of Ideas

ADVERTISEMENTS are selected seeds of ideas planted in the soil of your mind. If cultivated thoughtfully, these ideas will produce greater comforts and better methods of accomplishing your aims. These selected seeds of advertising can help you to live more fully at less cost.

The advertisements in this publication are a record of what the manufacturers are doing for you. They will give you many new ideas and will tell you what you want to buy. And they will help you get the most for your money.

The advertisements are news. They are interesting. Form the habit of reading them carefully and regularly. It will pay you to keep informed of the daily progress of business.

For full value--buy standard products. Manufacturers stand back of advertised goods.

PENNSYLVANIA FARMER

Published Weekly

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

August 16, 1930



Four-Horned Persian Sheep on a Long Island Estate

Philadelphia

Pittsburgh

Harrisburg

Farm Facts and Fancies

By ALVA AGEE

The ever increasing confidence in Park & Pollard feeds is due to their sure profits to feeders.

Use our dairy feeds to insure maximum production and health.

Complete List of Park & Pollard Feeds

Poultry Feeds: Lay or Brood Dry Mash - Red Ribbon Scratch - Growing Feed - Intermediate Chick Feed - P & P Chick Scratch - P & P Chick Starter - Dairy Rations: Overall 21% - Milk-Maid 21% - Bet-R-Milk 20% - Herd Health 16% - Milkmaid Calf Meal - Other Feeds: P & P Stock Feed - Bison Stock Feed - Go-Tu-It Pig and Hog Ration - Pigeon Feed - P & P Horse Feed - Porchona Table Corn Meal.

I do not know anything about sun spots. People who know probably also know much that is not so. Distance always favors inaccuracy. The spots may be responsible in some measure for periods of excessive heat and drouth, but the fact one way or the other seems to me unimportant. The only thing that really counts is that a year now and then brings such drouth and excessive heat that the best farming in the world cannot counteract their effect in any half-satisfying degree.

The dependence of the farmer on the weather promises to remain the outstanding factor in the uncertainty that is tied up in his business. If bankers had to face as much uncertainty they might want the government to guarantee them cost plus ten per cent just as some manufacturers did during the war.

Cropping and Rainfall

The normal amount of heat and water fixes the character of a region's agriculture. There are farmers on the Western Coast who make money cropping land that gets only ten or eleven inches of rainfall in the year. They have found, for example, that they can grow a crop of Lima beans on land that got that many inches of water the previous winter.

When land gets from fifty to one hundred per cent more water, from Texas northward to the Canadian line, there is adjustment of crops and methods to normal rainfall that brings success to the farmer. Farther east the cropping is adjusted to a bigger normal rainfall, distributed through the year, and to a certain range of temperature, and a total rainfall that satisfies the western bean grower means disaster to the eastern farmer. And excessive heat is worse than drouth.

Discouragement

It is a long time ago that I first was annoyed by the comment of a financial authority that an immense wheat crop, which had sent prices way to the bottom, was after all a good thing for the railroads because they would have all that wheat to handle. It was true enough, in a way, but I didn't like the way it was said. And now drouth and heat mean less of some kinds of produce to handle and loss of some manufactured goods to be bought, but these prospective losses, great as they may be, are too minor a matter for comparison with the losses and discouragement of hundreds of thousands of human beings who see that they cannot break even this year.

With transportation lines and manufacturers it is a financial problem, and important enough in its way, but it is a mighty human problem for the man who sees that he may not be able to meet interest, or to educate children as planned, or even to keep up courage for another year, and that is worst of all. A year following a dry summer is more promising than a year following a wet summer. I think this is true, and there are substantial reasons for the belief.

Bread for China

A subscriber who rightly is troubled by the famine situation in China, and also by the surplus of wheat in this country, writes: "The farmers ought to dump, say, twenty-five per cent of the wheat crop into the hands of the China Famine Relief, Inc., and put the price up enough on what remains to cover the cost of the whole." If no new wheat had moved out of growers' hands, if there were perfect organization among growers, and if the gift were large enough to reduce supply to demand so that the tariff rate could be added to the price within this country, China's millions would be saved great suffering and our growers would not be the losers by the gift. The "ifs" are insurmountable at this time.

Chairman Legge's Appeal

But there is an even bigger "if." A good price for wheat within our country means increased production unless there is agreement to restrict acreage to home needs, and Chairman Legge's recent visit to the center of winter wheat production makes the fact clear that restriction is not acceptable to the growers. Their argument is that cost of equipment for seeding and harvesting demands big acreages on the individual farms.

Personally, I should like to see our government make a big contribution of wheat to relieve awful famine conditions in the Orient, but as a means of securing and maintaining a good price level for wheat in this country I cannot see any means except reduction of production to a point slightly below consumptive demand. Job says that there is a time for everything, and right now is the time I am discouraged about a satisfactory solution of our wheat problem.

Energy

Always we are guessing on the future. The farmer does it when he plants and the United States Steel Company when it spends millions on new facilities while there is not a market for present output. The pessimist looks the world over and says that this country must drop back because industry throughout the world is in a bad way. He tells us that our level of living must gradually approach the world plane of living. He fails to take into account the store of energy in the American people. Life and growth are bound together so tight in their thinking that as long as there is life there is pretty sure to be growth. It is a mental attitude that cannot be downed. The individual who has it usually wins in the long run.

Maybe it is a mingling of races here, maybe it is the air, maybe it is because we have been a meat-eating people, maybe, more probably, it has been our country's undeveloped resources that offered opportunity. Be it one, all or other causes, energy will keep American people moving up to better planes of living. The exceptions are a small percentage, and even if one lacks energy he can qualify for refueling for the tree-sitters that so abound during these dog-days.

Late May Pigs

WITH the very bullish feeling and active scramble for feeding shotes early the past spring we let them all go by. March was lousy and it was kind of a relief not to see a bunch of shotes wading through the mud and stirring up Mother Earth with their noses.

About the first of May we took on a few common looking gilts that had been after a feedlot of cattle and to farrow in two or three weeks. These three weeks of grass put them in fine condition to farrow and not a pig was lost, coming from May 20 to 25. Pigs arriving at such a late date must surely be aimed at the low-priced glut of the year. Earlier in our farming experience we would not have looked at such unseasonable pigs.

These pigs were out in the sun the second day and have been very fine "doers" all the time. They can nurse the sows for nine or ten weeks and yet have time to "throw the corn into" the sows and sell them on the better fall market. Saved the corn for these sows, the muddy staid for early pigs; given the more sunny and more livable summer season to kick around our pigs can actually be started much cheaper as well.

Next December when we buy or take our "medicine" in the way of a lower price per pound we are going to recall with some satisfaction at least what a nice easy start we had with our May pigs and what a quick "pick-up" they showed. H. D.

Term of School

By W. D. ZINN

Is an eight-month term of school too long for the country in West Virginia? The writer has introduced this subject on previous occasions in this paper and has thereby brought down the anathemas of certain school people upon his head, but he is able to stand this and is again being himself liable to be criticised.

Only last week a heavy taxpayer told me in hearing that their school had been carried on for eight months with an average attendance of four pupils. The teacher was paid over one hundred dollars per month. This condition existed, he said, in many places in the county. On account of the work on the farms many of the older boys and girls do not get to enter school until the beginning of the second month and they are taken out of school one month before it closes. This reduces the average attendance in many schools.

State Fixes Salaries

Years ago the taxpayer was permitted to vote whether a levy should be laid for school purposes. Later this law was so amended that it was not necessary for the voter to vote on the question, and there was but little objection to the change. At that time the Board of Education fixed the salaries of the teachers, but under the new regime a minimum and a maximum salary are fixed by the state. The Board has no authority to pay a less or a greater salary than the state says shall be paid. In many counties there is a surplus of teachers, but here is a case where the law of supply and demand does not govern prices. This surplus is increasing rapidly, but the teachers get the same price.

A bill was introduced into the last Legislature providing that the people should have a right to vote whether they wanted a six or an eight-month term of school but the bill did not get out of the committee room. Since the taxpayers pay for the running of the schools, is it any more than right that they should say how long the term should be? If the question was submitted to the taxpayers some districts and some counties no doubt would vote for an eight-month term, while many others would vote for a six-month term, but is that any reason why they should not be allowed to decide the question for themselves?

Age of Graduation

Many years ago the towns had six and eight months of school while the country had but four months. The teachers in those days came from the rural sections to teach both the rural and the town schools.

Boys and girls are being graduated from the grades at from 12 to 14 years of age and from the high schools at 17 and 18 years of age, and that is too young to send them away from home. A six-month term of school would hold them a year or two longer in school. When they did get out their minds would be more fully developed and they would be better prepared to decide whether they wanted college training or wanted to engage in business.

Preparation for Life Work

The boy or the girl will be better prepared for the farm or the home if he or she spends half the year on the farm and the other half in school. Young people need to be trained in earning money and they need to be taught how to spend it judiciously. Herein are the school of the present day failing.

More than 60 per cent of the taxes we pay go to support the schools. Hundreds of homes are being sold for the taxes levied against them and it then is ever to come any relief to the over-burdened tax payer the schools as well as all other institutions must make some sacrifices. For two years the livestock farmers have lost money. Is it any more than fair to ask teachers to stand a little less?

In Late Summer

Every Idle Bird Is a Drag On Your Income

MAKE IT YOUR AIM to own a flock in which every hen and pullet is a layer. Get rid of the summer boarders as quickly as possible; they are expensive guests.

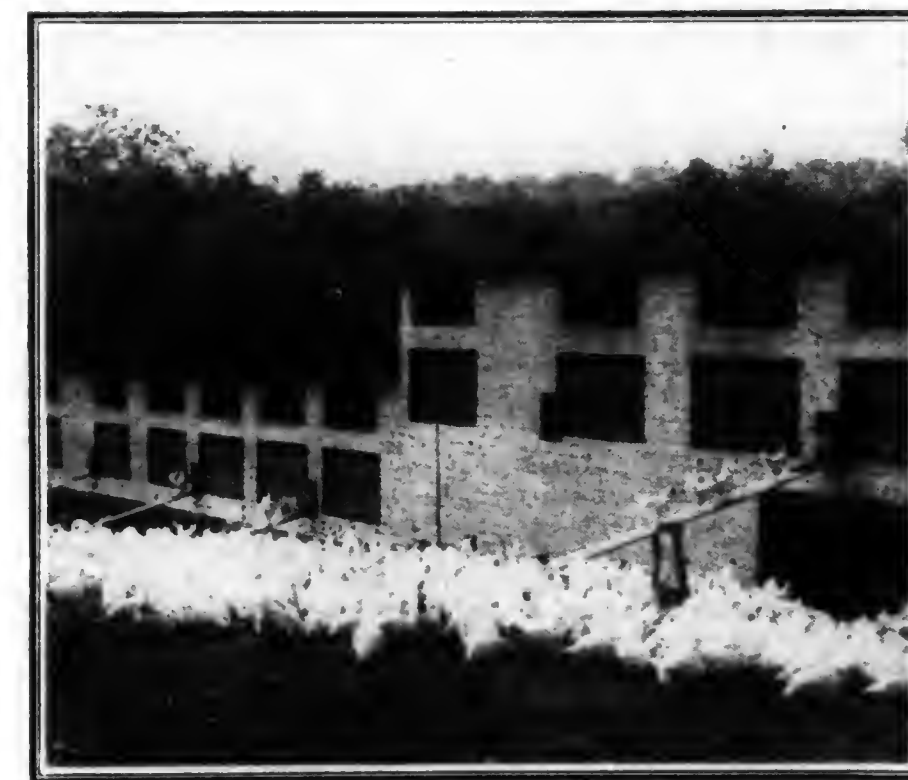
Of course, to know which are which, you must feed them so the birds that *can* lay will have a chance to prove it. For this purpose,

use Amco Open Formula Mash, because these mashers give the best results in production and condition, and also keep your costs way down.

After culling, continue to feed Amco to your laying flock and to your pullets. This will keep your hens from an early molt and continue to build up your pullets after heavy production begins. Management like this is responsible for the fine story the Kurtz Brothers have to tell.

Ask your nearest Amco Agent

to get you a copy of Extra Eggs, a booklet that tells you in a clear manner how to manage your summer birds for extra profits.



Where 16,500 Birds Get Amco

Laurel Run Poultry Farms, owned by the Kurtz Brothers, of Ohio, Pa., have a flock made up of 4,500 layers, and 12,000 chicks.

They have fed Amco for four years, and have secured fine production and wonderful condition. At the last Poultry Show in Pittsburgh they showed the first prize pullet, and got eight other places, all in the production class.

The Kurtz Brothers say, "We feel very proud of this show record."

as it is the first time we have entered birds in any show. We attribute the major credit for our well-developed birds to Amco Feeds."

Amco Super Egg Mash is used for the layers and Amco Starting and Growing Mash for the chicks. The pullets weighed 3½ pounds when placed in laying quarters and gained right up to the time when heavy production set in. The layers kept in splendid condition, although their production is very heavy.



DISTRICT OFFICE: MUNCY, PA.

Save STEPS and you Save TIME, MONEY, HEALTH -have RUNNING WATER

No task is more complete drudgery for the farm woman than the old-fashioned method of pumping and carrying water. A Hoosier water system banishes this drudgery and waste of time and energy forever. It supplies water under pressure AUTOMATICALLY, IN PLENTY, ECONOMICALLY, not only for household use, but for every other purpose on the farm.

The Hoosier is built for permanent service. It is simple, rugged, and built of quality materials. And it is protected by a heavy coating of pure zinc, applied by the famous Galv-A-Zinc Process.

FLINT & WALLING MFG. CO.

24 OAK STREET

A Free Book

The book shows you how easy and inexpensive it is to have running water. A word from you will bring your copy, without obligation. Write for it today.

Also Builders of the STAR Windmill

HOOSIER WATER SERVICE

KENDALLVILLE, INDIANA U.S.A.

Write for it today.

Write for it today.

Write for it today.

Write for it today.

Write for it today.

Write for it today.

Write for it today.

Write for it today.

Write for it today.

Write for it today.

Write for it today.

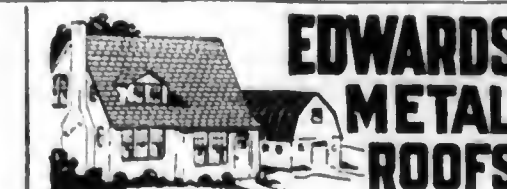
Write for it today.

Write for it today.

Write for it today.

Write for it today.

Write for it today.



Greatest Values - Lowest Prices

DURABLE Roof your house or barn with Edwards Metal Roofing, and it's needed for good. Fire proof, rust proof, lightning-proof, wind and weather proof. Pure steel, painted or galvanized or Edwards famous rust resisting, copper-bearing steel.

BEAUTIFUL Styles for every purpose and effect. Shingles, tin, tin-plated, tin-clad, Spanish tile. Sheets (plain or corrugated, r-rolled or standing seam).

ECONOMICAL We roll our steel, make it to your size, and sell it direct to you at amazingly low factory prices.

Thousands of farmers have found Edwards Metal Roofing the permanent solution to the roofing problem. You will too. Write for free samples, prices and Roofing Book No. 1991.

The Edwards Manufacturing Company

8241-8291 Butler St.

Cincinnati, Ohio

1931

1931

1931

1931

1931

1931

1931

1931

1931

1931

1931

1931

1931

1931

1931

1931

1931

1931

1931

1931

1931

1931

Please Mention Pennsylvania Farmer When Writing to Advertisers

Shift Your LAYERS into "HIGH!"

**EVERY last egg your
hens have been bred
to lay—that's High Gear Pro-
duction!**

Increase your egg profits—get every cent of profit possible from your feed dollar—shift your layers into "High" with Larro Egg Mash and Larro Scratch Grains.

Larro Egg Mash was developed for "High Gear" performance, yet it is decidedly *not* a forcing ration. It has proved in eight years of continuous testing at Larro Research Farm against all known egg rations, that it brings *more eggs and more profits* without sacrifice of health or vitality to the hen. It has brought out laying capacities in flocks that owners never thought existed—it has changed border flock to profit producers!

If your laying flock is not on Larro Egg Mash, it's not in "High". D. Higgenbotham's letter here tells what his shift to "High" did for him!

Callahan, Fla.
July 31st, 1930.
Starting with 1000 chicks on Larro Chick Starter and Larro Growing Mash I was able to put 512 pullets in the laying house. The pullets were fed on Larro Egg Mash and showed a profit of \$3.40 per bird for the past year. The highest day's production was 91%. This was obtained by a gradual increase. The mortality on these hens for the year ran less than 2%. D. Higgenbotham.

THE LARROE MILLING COMPANY
Detroit, Michigan

Larro

FEEDS THAT DO NOT VARY
FOR POULTRY • HOGS • DAIRY

LARRO FAMILY FLOUR BEST FOR BREAD, BISCUITS, CAKES AND PIES

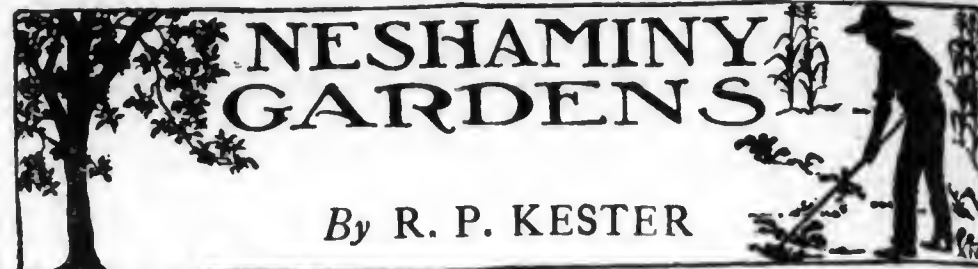
CIDER! How Profitable to Press it from Culls and Second Grade Apples

Many people are making big profits by operating a Farquhar Cider Press. Because the press is built in sizes suitable for Roadside Marketing, the Individual Orchardist and Custom Pressing. It is easily operated, needs little pressure and gets better and richer cider.

Press Supply, Hammer Type Pulper, Rotary Cider Strainer, Quick Drain Racks, etc.
Ask for Bulletin on Roadside Press and Engines, Rollers, Sawmills. The Orchard, Hay Bales and Farm Machinery.

A. B. FARQUHAR CO., Limited Box 146, York, Pa.

READ THE ADVERTISEMENTS TO KNOW WHAT
IS BEST AND WHERE TO BUY



By R. P. KESTER

I SHALL use the following letter as a text this week because there are several questions which may be of general interest:

"Mr. R. P. Kester:—Having been a reader of the National Stockman and Farmer and the Pennsylvania Stockman and Farmer for a number of years, I am going to write for some advice and ask a few questions.

"In the first place, I want to state that I am not a farmer. The extent of my farming is several large garden patches. Being regularly employed on shift work I have quite a bit of spare time on my hands which I find it profitable to put in at gardening.

"Now I have available a piece of river bottom land of about two acres, more or less, which I can put out next year. This has grown to weeds and grass for about six or seven years and the folks want it cultivated to keep down the weeds.

"Have a part of it out this year, just what I can tend by hand tools, possibly 100x100 feet.

"Now I want to know if you can give me any facts concerning these garden tractors, especially the kind you have. Would it be profitable on a patch of this size when all plowing and tilling has to be hired? Would this type of machine handle this soil which is sandy clay and very loose?

"I would be glad to hear from any of the readers who have had experience with these machines.

"This spring I planted peas and, although the dry spell kept my crop back I found that on the higher, sandy ground the peas flourished, while on the lower clay ground they hardly grew at all. Would lime help this? The lower ground is well drained and apparently does not hold water to sour it. It seems possible that a lack of available nitrogen is the reason. Can peas be inoculated with bacteria successfully?

"I wanted to start an extensive strawberry patch here at the house, but the dry weather this spring spoiled my plans. Can they be set this fall, provided it rains, with any chance of growing? Local conditions indicate an everbearing type is the one to put out.

"Forgot to mention in above relating to tractor that I am in easy hauling distance of Charleston and can get express service of about two hours from field to commission house. I believe this factor is important to consider.

"Thanking you in advance for any information you can give me I am
"West Virginia. E. J. E."

To Discourage Weeds

River bottom land is usually susceptible to treatment which makes it ideal for trucking crops, provided it does not receive destructive overflows from the river. However, it will likely require a lot of work to rid it of weeds. I would advise plowing it at once and keeping it cultivated until the latter part of October when I would sow it to rye, to be turned under next spring. This will cause a lot of weed seed to germinate, and harrowing will kill them. Land which annually grows a crop of weeds becomes filled with seed and these will continue to germinate for a number of years, unless frequent stirrings of the ground bring them up close to the surface so that they will start to grow quickly.

A garden tractor of fair size and power will take care of the kind of land you describe, and two acres could be handled even to the plowing. The one you refer to will do it, and there are others now made which are successful. But if you want to turn down a big crop of weeds, get a team or a

big tractor. Garden tractors are not intended to plow heavy sod or rank growth.

Phosphorus Needed

Peas require a sweet soil, being legumes. It is altogether possible that your peas this year failed on the lower part of your ground because the soil was more acid there. Very often, river bottom land is deficient in phosphorus, and legumes must have phosphorus as well as lime. Use plenty of superphosphate, and as much nitrogen and potash as the needs indicate. If the ground has never grown peas or similar crops, it would be well to inoculate the seed for a year or two. Your county agent can no doubt tell you how to go about it and where to get the inoculation.

Personally, I have never found any advantage in setting strawberry plants in the fall, unless potted plants are used, and for commercial purposes this does not pay. It is difficult to get good, vigorous plants early enough for them to make any growth worth mentioning in the fall. Have the ground ready and plant them as early as possible in the spring and you will be just as far ahead. Maybe you could make everbearing strawberries pay commercially. The Mastodon is probably the best variety.

Friendly Talks

By
Edgar L.
Vincent

JUST a bit of a story about two men, now both gone. When Roosevelt was President, Taft was our representative in the Philippines. For a long time no word reached Washington from Mr. Taft.

"How are you?" cabled the President.

"Fine," came back the answer.

"Rode twelve miles today."

Again Roosevelt cabled, "How is the horse?"

History has lost Mr. Taft's reply, but he knew that the President was just wondering how well a horse might carry a man of Taft's weight.

There is something in this, however, for every farmer who depends on horses for his motive power. Not always are we as thoughtful as we should be of these faithful animals. Often they get worked beyond the real limit of their strength. Frequently they do not get water when they are thirsty. Scolded, whipped and perhaps more seriously abused, they go on day after day, uncomplainingly. If they knew their strength, or took advantage of it, they would show their masters that there are two sides to every argument and clear themselves from whatever machinery they may happen to be attached to.

And there is more to this than the point of justice. The men who give way to their passions may not realize it, but they are abusing themselves worse than they are treating their horses when they kick and scold and maul them about. Temper uncontrolled puts a spark to a fire that burns up the finer instincts of one's nature. Life is made up of just such little things as driving horses, milking cows and handling other farm animals. If we do this work sensibly and sanely we add something fine to our characters.

And then, too, we help our boys and girls and everybody who comes in contact with us to be better men and women. Stop a minute now and ask yourself, "How do I treat my horse?"

More Readers on Farms in Pennsylvania than Any Other Farm Paper

President Arthur Capper
Vice-President T. D. Harman
Vice-President Geo. M. Slocum
Editor-in-Chief E. S. Bayard
Manager Neff Laing

PENNSYLVANIA FARMER

Published Weekly
Established 1877

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of Mar. 3, 1879.
PUBLISHED EVERY SATURDAY BY

CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., August 16, 1930

No. 7

160 Years of Soil Improvement

By GEO. F. JOHNSON

FARMERS in the vicinity of Philadelphia probably contributed more to the early knowledge of soil improvement in this country than the farmers in any other section of the thirteen original colonies. The story of how these farmers broke down prejudices, overcame ignorance and withstood all kinds of ridicule in order to restore fertility in soils exhausted from one hundred years of continuous cropping, makes an interesting chapter in the development of American agriculture.

It is now just 160 years since Judge Richard Peters, whom George Washington described as a man of humor, a theorist and the best practical farmer in southeastern Pennsylvania, purchased a bushel of land plaster (gypsum) from a maker of stucco ornaments in Philadelphia and applied it to a strip of land on one of his farms. This marks the beginning of chemical fertilization of soils in Pennsylvania.

Meager information regarding the value of land plaster as a fertilizer had reached Philadelphia from Germany where an observing laborer had accidentally discovered the beneficial effects of this chemical on worn-out soil. Judge Peters was determined to give the idea a thorough test in this country. At first, according to the records, his efforts were limited and very discouraging. He was ridiculed by his less progressive neighbors and was confronted on all sides by existing prejudices, but he persisted and not many years passed before his farms were the best examples of the use of land plaster, and later lime, in America.

Judge Peters and other progressive farmers of that time were aided in their efforts by the fact that gypsum had been brought occasionally to Philadelphia and Wilmington as ballast in ships. This material accumulated at the wharves, since its value as a fertilizer was not known. Load after load of the chemical were hauled from these ports to farms

of alert land owners in Chester, Delaware and other southeastern Pennsylvania counties, before 1800.

About the time gypsum was first applied as a soil corrective in this country, red clover seed was imported and sown in gardens and on pasture lots near Philadelphia. One of the leaders in popularizing red clover was James Vaux, of Montgomery county, who was among the first to recognize the value of clover in a program of building up poor, sour soil.

The limited extent to which red clover was grown in the colonies before the Revolutionary War is revealed by the fact that in 1773 Mr. Vaux was unable to buy red clover seed in quantity in Pennsylvania and had to send to England for it. The first shipment proved unfit for seed, making it necessary for him to send for more. Before he secured his second shipment war was declared and his experiments had to be postponed until 1785 when he began in earnest to sow red clover extensively. His success soon made him an enthusiastic advocate of the crop.

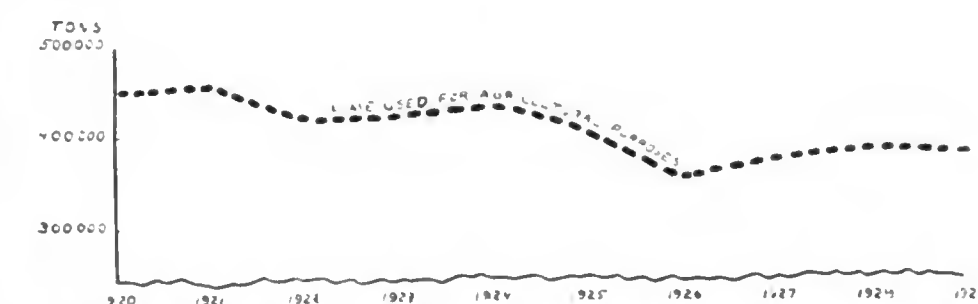


Chart 2.—While the total tonnage of lime used for agricultural purposes has decreased slightly during recent years, the amount applied is increasing each year in many of the counties, especially those outside of the limestone districts. (Figures from state estimates.)

He even went so far as to urge a state bounty on the production of clover seed.

The agricultural conditions prevailing in Pennsylvania and other colonies just before and during the Revolutionary War must be understood to fully appreciate the services of Judge Peters and Mr. Vaux to the farming industry of their time. When the War came, land surrounding Philadelphia had been farmed for almost a hundred years without any added fertilizer excepting a limited amount of animal manure, and without a system of rotation with legume crops.

In the history of Delaware county we find this account of farming methods written in 1796 by Squire Thomas Cheyney: "Our land is mostly good, but we have dropped our old method of farming. We used to break up our fields in May, stir them in August and sow them with wheat or rye in September. This was done once in three or four years. In the intermediate period the land was pastured. The soil would produce from 12 to 20 bushels of grain per acre. This was followed until the land ran out, as we called it. We planted corn, sowed barley, oats and flax, likewise buckwheat, in small portions of land allotted for that purpose. These crops took the greatest part of our barnyard manure. Our meadows got some manure too so that there was very little left for winter grain. We followed this old way until we could scarcely raise our bread and seed."

Soil exhaustion became an acute problem even before the war. Many fields which first produced from 25 to 35 bushels of wheat per acre had ceased to yield one-third that amount after 50 to 75 years of cultivation. Soil deterioration became especially noticeable after 1750. In fact, it was not uncommon during this period to see large tracts of land in southeastern Pennsylvania abandoned for agricultural purposes and left uncultivated, re-

Chart 3.—Legume hay crops are gradually replacing timothy in rotations on Pennsylvania farms. The decrease since 1909 in timothy hay acreage has more than been balanced by an increase in the clover and alfalfa acreage. The acreage of clover and timothy mixed has remained practically unchanged. (Federal census figures.)

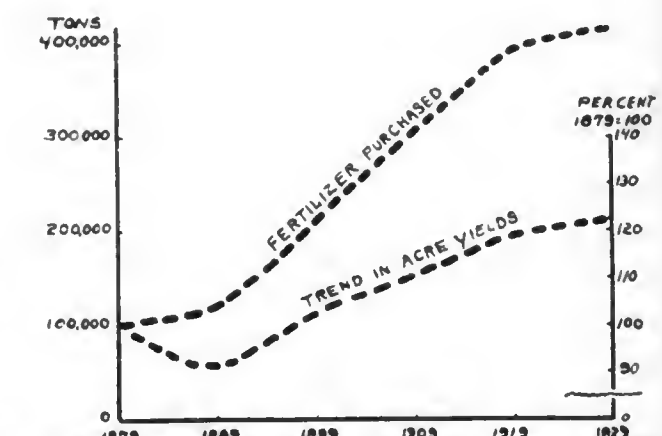


Chart 1.—The upper line indicates the increase in estimated amount of fertilizer used on Pennsylvania farms, from 103,680 tons in 1879 to 416,220 tons in 1929. The lower line shows the upward trend in acre yields of principal field crops during the same period. Many factors, such as better rotations, more complete control of insects and plant diseases, improved varieties of crops and the cultivation of less poor land, in addition to the use of more and better fertilizer, have aided in bringing about these higher average acre yields. (All figures derived from federal censuses or state estimates.)

ords indicate. It was the memory of such disheartening conditions that prompted Robert Vaux, in 1825, to say in an address before the Philadelphia Society for the Promotion of Agriculture: "The use of lime and gypsum as fertilizer of the ground, the introduction of clover, and the rotation of crops constitutes the happy causes which gave the first grand impulse to the agricultural prosperity of modern Pennsylvania."

The use of gypsum broke down prejudices against the application of chemicals to the soil so that when attention turned to lime, about 1800, it did not take long for this product to become a general favorite. While gypsum had worked miracles on a great many fields, it was soon discovered that repeated applications did not give the same good results. Lime, on the other hand, continued to prove beneficial and to increase in popularity so that by 1825, one of the soil fertility students of the day could report: "It is owing to the extensive and continued application of lime combined with a better system of farming that much of the soil (in the vicinity of Philadelphia) has been brought from an exhausted condition to its present state of fertility and productivity."

The first lime kiln in Chester county was built in 1806. Apparently soon after that date, kilns were constructed in the vicinity of limestone outcrops throughout the southeastern section of the Commonwealth. At first the stone was hauled to the farms and burnt at a point convenient to the fields. This accounts for the fact that the remains of old kilns can still be found at great distances from limestone quarries. Later, of course, the stone was burnt at the quarry and hauled to the farms, ready for applying to the land. Not until after lime had been extensively applied to the sour, worn-out soils so prevalent at the time, did clover become a dependable and popular hay crop. Soon after 1800 red clover was added to timothy for a hay crop in Lancaster county.

It was the so-called "gentlemen farmers" who gave most attention to soil improvement until after the War of 1812. Then, markets began to increase rapidly due to the growth of urban centers throughout the East. With this new demand for farm products, the "dirt farmers" turned their attention to better farm management. Iron plows, harrows and cultivators came into use during this period and with these came better tillage. The horse rakes were also invented and these stimulated the planting of more hay. Barnyard manure was more carefully preserved, lime was more widely used and clover more generally grown. By 1840, the new system of farm management had brought

(Continued on page 14)

PENNSYLVANIA FARMER

Published Weekly
Consolidated with
PENNSYLVANIA STOCKMAN AND FARMER

Published Every Saturday by
CAPPER-HARMAN-SLOCUM, INC.
2301 Penn Ave., Pittsburgh, Pa.

Editor-in-Chief: Arthur Capper
Editor: T. D. Harman, Geo. M. Slocum
Managing Editor: Neff Laine

EDITORIAL STAFF
Editor-in-Chief: Arthur Capper
Editor: T. D. Harman, Geo. M. Slocum
Managing Editor: Neff Laine

EDITORIAL OFFICES
Pittsburgh: Harrisburg
Philadelphia

CONTRIBUTING EDITORS
H. P. Kester, J. G. Lippman
W. A. Light, H. C. Knaebel
R. C. Blasingame, R. L. Scharringhausen
J. E. Shuler, A. A. Harland
W. D. Zinn, Mrs. Gertrude Stewart
F. L. Bentley, Gilbert S. Watts

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR.
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for livestock and classified advertising. No deceptive, immoral or swindling advertisement inserted at any price.
Member Agricultural Publishers' Association.
Audit Bureau of Circulations.

Volume 103, No. 7 Established 1877

FIRE RISKS

FORESTS and grass fires have been raging throughout this territory, a natural result of unusual weather conditions. The fact that October generally sees the worst forest fires of the year indicates that vigilance should not be relaxed even if rains diminish the danger. Carelessness under present conditions is inexcusable, for the risk is so apparent that all know about it. Increased caution about fire may prevent heavy losses this fall.

NEW MILK LAW

WE have received many questions about the Pennsylvania milk law, which will go into effect the first of next month. On another page of this issue some of these questions are answered, as others will be in an article to follow. We believe that dairy-men will find the law neither drastic nor unreasonable, but its administration both sympathetic and sensible. Its object is to keep milk clean from cow to consumer, and some leeway is allowed in accomplishing this to meet the varied conditions on farms.

NATIONAL DAIRY SHOW

THE cattle prize list of the 1930 National Dairy Exposition is ready for distribution. A total of \$25,000 is offered for the five dairy breeds, which should be sufficient inducement to exhibit cattle, although the prestige of winning at this show is worth more than prize money to breeders. The Exposition, which will be the 24th event of its kind, will be held at St. Louis, Oct. 11-19.

A Dairy Futurity has been inaugurated in connection with the Exposition. The Futurity opens in 1932 when calves born between August 1, 1929, and July 31, 1930, will compete as two-year-olds. Sires and dams are nominated this year for the event. Entries for calves born during the year ending July 31 of this year totaled 314 head.

THIRD STATE TESTED

ON August 1st Michigan was officially designated as a modified accredited area, meaning that all its herds are practically free from tuberculosis. This is the third state to attain the distinction, Maine having qualified in March, 1928, and North Carolina in October, 1928. Final accreditation in Michigan followed the dismissal of a case in which

the validity of the law authorizing the test was questioned. Judge Hawley of the circuit court of Ionia, Mich., ruled that public authorities have the right to test privately owned cattle in a campaign to eradicate bovine tuberculosis, on the grounds that the law is a necessary public-health measure and comes within the authority of the state. The decision is regarded as having important bearing on similar work in other states. Things are more pleasant, and results more favorable, however, where farmers approve the test rather than oppose it.

THE SEVENTH YEAR

WE may expect to hear many explanations of the long drouth which is scorching the country and causing much concern. The Smithsonian Institute explains it by saying that crops fail every seven years, and always have—some place. They also take occasion to advise farmers to lay away one-seventh of their net income every year to enable them to tide over the "lean" seventh. This is very good advice. It is too bad that we did not have it sooner, but maybe the scientists think it will be remembered better if given in a period which has been described as approaching a national calamity. And maybe it took a national calamity to remind them of it.

SILENT SERVANTS

HARD indeed is the heart of a man who can bear to see a dumb beast in distress and all efforts to prevent cruelty to animals must meet the approval of most persons. But occasionally zeal for this worthy cause carries its champion to great lengths. For instance, a writer who deprecates the practice of propping saddle-horses' tails up until they grow pointed skyward, objects to it on the grounds that it renders the horse "less articulate than ever." Since the tail is one of the horse's means of expression, when he cannot raise or lower it he cannot express joy or fear fluently. If denial of the caudal means of expression is a hardship on a horse, what must be the anguish of a mule which through some mishap is deprived of the eloquence of its ears? We have seen hybrid-flopping through life in apparent indifference, while others kept up a lively comment on current events with their auditory appendages. Perhaps many misjudged mules are the victims of unkind fate and not guilty of the disdain toward the rest of the world their actions indicate because they cannot tell us their thoughts. But possibly we would not be flattered if we knew their thoughts.

TWO DEADLY BULLS

ON July 30th Mrs. A. L. Johnson of near Upper Sandusky, Ohio, was so seriously gored by a bull that she died before she could be rushed to a hospital. The bull had not been regarded as vicious.

Most bull attacks which come to our attention originate in this country, but the following shows that a bull's temper is equally uncertain under any flag. Mr. Kilders Bentley, a farmer of Derbyshire, England, seeing his farm hand Ernest Thompson attacked by a bull, went for the animal with a whip. The bull charged Mr. Bentley, breaking two ribs and inflicting painful injuries. Other men drove the animal off. Mr. Thompson died later. Facing an enraged bull with a whip is an exhibition of great courage but poor judgment.

SHEEP OUTLOOK

THIS year's official sheep and wool outlook dwells more on facts than on forecasts. A reduction of sheep numbers is foreseen but no prophecy as to future prices

is mentioned. While the outlookers think that such reduction would "improve the position" of the industry, they say that liquidations following previous expansions were often too drastic, and intimate that the grower may do well to follow his own judgment. This he doubtless will do. That his judgment coincides somewhat with the outlook is indicated by a move to restrict lamb production in Texas. The plan is to reduce the number of ewes bred by 25 per cent and turn some of the lambs into a fund to promote consumption of the meat. In view of the efforts made to reduce supplies of many commodities farmers in general will be interested in the response of growers to this suggestion. If voluntary control of production will work anywhere it should work among western sheepmen.

DROUTH RELIEF

CYNICS who see a selfish world sliding to the proverbial how-wows and the milk of human kindness turned sour in our mad scramble for dollars will have their pessimistic natures jolted by the quick and generous response made by the government and the railroads to the plea for relief of drouth-stricken areas. While it is uncertain what the government can do to ease the distress caused by ruined crops and depleted herds, facts are being gathered to show the extent and location of need, governors are called into conference to offer suggestions, a plan is considered to provide emergency credit and transportation lines have stated their readiness to assist in moving livestock to feed or feed to livestock. Fortunately much of the territory in which this paper circulates has not suffered so severely as some other sections and can still hope to profit by rain. But some parts are facing the worst disaster in their history and will welcome any help the government or anybody else may offer. Meanwhile the prices of grain continue to advance, which is consolation only to those who have it. "Abundance is not synonymous with profits," said an orator in lambasting the surplus. Maybe not, but a shortage is no comfort to the fellow experiencing it. However, the end of the crop year may show higher yields than present reports indicate.

OTHER COUNTRIES

SPEAKING of the large carry-over of wheat and low wheat prices Chairman Legge of the Federal Farm Board says:

"There is absolutely no relief possible from this situation through any of the plans that have been suggested contemplating the disposal of the surplus abroad at prices below the domestic level. Many of the most important wheat importing countries of the world now have legislation in effect that could be applied to prevent or penalize any such action on the part of the growers of this country, and others are seriously considering such action. As we have exactly the same legislation in effect here to protect the American producers, we cannot reasonably complain of other nations taking similar action to protect their growers."

He therefore advises farmers to feed what to livestock as an expedient to meet the present emergency, while the reduction of production is held as the only thing which will improve the wheat situation permanently. The first advice is being taken by many growers now. The outcome of the second is more uncertain, western wheat growers being divided between following their inclination and Mr. Legge's advice.

Recognition of the fact that the buyer will always have something to say would denude our thinking about wheat marketing. It is well to remember that other countries are as interested in their welfare as they are in ours, and a lot more so, yet most artificial price-fixing schemes ignore that highly important person in any deal, the buyer.

New Jersey Farm Comment

By G. W. HARRIS

THE drouth is working a hardship on farmers in most sections of the country. While New Jersey farmers have suffered conditions are not as serious as in neighboring states. The dairymen in the northwest section of New Jersey have been hit severely and have parched pastures. Corn and hay crops are also showing the effects of the lack of moisture. The New Jersey potato crop was not affected by the drouth, but tomatoes and other vegetable crops will be damaged unless rain comes in the near future.

Delaware reports severe drouth and the light showers have not been very helpful. The string bean crop has been almost a complete failure with many growers not harvesting a large enough crop to pay expenses. The dry weather has also reduced the size of the apples to some extent. In parts of Pennsylvania the drouth is very severe. In the Cumberland valley the corn is drying in the fields, potato yields are cut and meadows are dry and yellow. The water supply is a serious problem and springs that have not been dry in years have stopped flowing. Wells are going dry and many men are having a difficult time to get enough water for their cattle.

Prices of corn and wheat are advanced as crop shortages are likely. Butter and eggs as well as other farm products will probably tend higher, especially if the drouth continues for a week longer. The weather has been more effective than any other agency in raising farm prices, but it is a tough dose for those growers who have seen their crops burn up.

A MODEL of a typical New Jersey farm is one of the attractions at the American Fair held at Atlantic City. The miniature farm house and barn are surrounded by fields of tiny crops. An orchard, an apiary and chickens are included in the model. A herd of dairy cows browse in a green pasture along a little stream. The model shows the diversity and importance of the state's agricultural industry, the crop output of which alone amounts to approximately \$100,000,000 annually.

THE annual field day of the New Jersey Holstein Breeders' Association was held this week at Forsgate Farm near Jamesburg. The principal speakers were Prof. H. I. Wing, president of the Holstein-Friesian Association of America, and M. S. Prescott, editor of the "Holstein-Friesian World."

FARMERS in Burlington county are preparing their alfalfa seed beds. The Extension Service advocates plowing three weeks in advance of seeding time thus giving the land a chance to settle and also giving the farmer a chance to kill weeds and grass by harrowing.

EVIDENCE that the fowls competing in the Vandealand Egg-Laying Contest did not like the recent hot weather was indicated by the fact that their egg production fell off five per cent during the forty-third week of the competition. Their output was 3,710 eggs or 358 less than the total for the preceding seven-day period. Three New Jersey White Leghorn flocks are listed among the high scorers for the week.

THE New Jersey tomato crop is about at its height. Marglobe, Bonnie Best and Stone are three of the chief varieties being harvested at this time. The crop this year is expected to total 2,636,629 bushels, as compared with 2,429,000 bushels in 1929. The total production for the United States this year is expected to reach 14,563,000 bushels, or 11 per cent more than in 1929.

THE warm weather has brought the peach crop to maturity and while the New Jersey crop is light this year it is of good quality. The Carman is the most plentiful variety on the market at this time. The Jubilee and the Cumberland are also being harvested. Hileys are expected to be ripe within a week and these will be followed by Georgia Belles and Elbertas. New Jersey will probably harvest about 1,365,000 bushels of peaches this year as compared with 2,600,000 a year ago.

REPORTS from a number of sections of the country state that livestock men threatened by a scarcity of corn and hay by the severe drouth are selling cattle at a sacrifice. There are rumors that this is being done in the southern part of

Pennsylvania. If this movement becomes wide spread it means that large quantities of poorly conditioned stock will be placed on the market and livestock prices will be forced down. The Federal Farm Board in a recent report advocates the use of wheat as a feed. With conditions as they are it appears that a large part of the surplus of wheat could be profitably used as livestock feed. The Missouri Experiment Station states that with corn at 85c a bushel, a bushel of wheat has a livestock feeding value of \$1.11.

THE opening day of the Flemington egg auction saw New Jersey fancy eggs bringing top prices of 46c. Most of the fancies sold for more than 40c per dozen with mediums going as high as 36 to 38 cents. The fancies had a minimum weight of 58 pounds per case, while some cases had over 60 pounds. The first lot of five dozen cases which



Why some boys prefer to stay on the farm

was sold brought the lowest price, namely 39c. These were pooled fancy eggs. Most of the producers seemed to be fairly well satisfied with the result of the first auction. A large number of buyers were present although several of them were apparently there to look on. Thirty-one different producers sold eggs over the block. The auction will be held twice weekly, on Tuesday and Friday afternoon, one o'clock standard time, in the basement of the Nevius Store, Flemington.

UNDAMAGED by drouth or hot weather, high quality New Jersey potatoes, favored by housewives because of their freedom from disease spots and medium size, are selling for moderate prices on markets throughout the state.

Increasing use of grades by producers accounts to a large extent for the popularity of the New Jersey product, according to information issued today by the State Department of Agriculture. Not only are officially graded potatoes uniform in size, but they also are certified as being free from disease by state inspectors.

Too many consumers fail to realize that there are market differences between various lots of potatoes offered for sale. Since potatoes appear on the tables of most homes at least once a day, it is important that housewives learn to distinguish good from poor ones, the State Department of Agriculture emphasizes.

Good quality potatoes are clean, smooth and firm. They are free from wasteful cuts, growth cracks, spots, green ends and unsightly knobs. Although early potatoes may be expected to be smaller than late ones, they should not be the size of marbles or golf balls, but should be well-formed and medium in size.

The Irish Cobbler potato, which is extensively grown in New Jersey, is one of the most popular of potato varieties. Round or nearly so in shape,

they are prized for boiling or baking whole, as well as mashing or frying. Experiments indicate that less waste is incurred by peeling the round type of potato than the elongated or rectangular type.

NEARLY 300 fruit and vegetable growers, representing every section of the state, attended the summer meeting of the State Horticultural Society at Glassboro on August 5, at the Normal School. Tours through the vegetable sections of Swedesboro and Mullica Hill and the fruit belt at Glassboro, were featured in the morning and in the afternoon, an open air meeting under the huge trees at the Normal School was held.

Despite the drouth and low prices for fruit and vegetables, the growers were not depressed, but were looking into the newer developments that the Gloucester county growers are developing.

At Swedesboro the growers looked over the new Break-of-Day tomato on the John Rode farm and the certified sweet potato fields owned by Frank Shaw. Stopping at Mullica Hill, they inspected the market garden farm of S. H. Starkey & Son, while at Richwood they visited the fruit and vegetable farms of Wade Heritage.

In the orchard district of Glassboro much interest was displayed in the attempt to control moisture in the orchards by using a hay mulch and overhead irrigation by the Repps. At the plant of the New Jersey Fruit Company a battery of washing machines was in operation, cleaning and polishing apples for market. An inspection of the central spray system on the farm of Wesley Brown also drew forth much interest. Here they saw 200 acres of orchards being sprayed from two central plants.

At the farm of R. H. Allen the visitors were shown the new non-arsenical sprays that Dr. T. J. Headlee has been developing for the codling moth. The last stop was the beautiful farm of Burnet Heritage, where they saw a fine crop of fruit and a new cold storage plant and packing house.

E. A. Meehling, president of the Horticultural Society, welcomed the visitors to Glassboro and praised the Gloucester county folks for their cooperation and the many new things they displayed for the benefit of the visitors. Among the other speakers on the program were Prof. Schermerhorn, who discussed the new Marglobe that has been put out with the club boys of Gloucester county.

M. A. Blake, state horticulturist, discussed peaches from many angles, including varieties, fertilization and sprays. He also had on exhibit a new variety of crab apple that was quite showy and attracted much attention.

The chief concern of the fruit growers was over the probable effect of the drouth on the apple crop. W. W. Oley, chief of the Bureau of Markets, stated that it now looked like a much shorter apple crop than was anticipated a few weeks ago. He was, however, quite optimistic over the future of the deal as he expected to see much better prices after the markets had disposed of much of the poor fruit now being offered. Touching on the peach situation, Mr. Oley believed that peach prices are likely to be higher as the season advances. He could see no cause for alarm over the storage holdings of peaches.

President Meehling thanked the committee for arranging the day's outing, which was composed of R. H. Allen, Glassboro; Wesley Brown, Glassboro; A. J. Farley, New Brunswick; B. L. Heritage, Swedesboro; George Lamb, Woodbury; Charles Repp, Glassboro; John Rode, Swedesboro; C. Fleming Stanger, Glassboro; Ralph Starkey, Mullica Hill and Earl Thompson, Clarksboro.

A. J. Farley, secretary of the Horticultural Society, announced that the next annual meeting would be held at Atlantic City in December. A. K.

BETWEEN three and four hundred individuals from all sections of Maryland and a number of nearby states attended the annual ram sale held recently on the grounds of the Centerville Court House, Queen Anne's county. All of the 38 animals consigned were sold, the average price received being \$31. The highest price for one animal was \$60, which was given for a ram belonging to the Saint Amour Company, Mortonville, Pa.

In the Hampshire class, first and second places were awarded to animals consigned by the Saint Amour Company. An animal belonging to John Muncester, Montgomery county, won first position in the Shropshire class.

On the Trail of Pizarro, But Far Behind

By E. S. BAYARD

THE night at Panama was our last hot one. The Pacific was warm but not hot all the way to the equator, and about the time we reached that line we met the cool southern current and had to discard our tropical clothing. The first land sighted was the rugged coast of Ecuador. Nothing was visible except hills and jungle, but a German salesman who is familiar with most of South America told me that several villages lie along the coast as well as the city of Guayaquil. Our ship does not stop there because the plague exists and a stop means quarantine at New York and Valparaiso. This German said that Ecuador was a terrible country, that the Creator must have had the toothache when he made it.

Our official announcement that dinner on the evening of the Fourth would be formal, in honor of the 154th anniversary of the independence of the United States, caused us all to put on evening clothes. It was hot but we did it and wilted our shirts and collars. The Captain proposed the health of the President of the United States, and there was no further formal ceremony. But horns, bells and other noise-making instruments were at each plate, with balloons and an unlimited supply of confetti and tri-colored paper streamers. The orchestra played our national air, then the Chilean, and we all stood through both.

I tried the water in the wash-bowl soon after passing the equator. It ran out counter-clockwise as I had been told it would. But others reported different results. When we got on land, and there is no chance for the motion of the ship to disturb it, I'll try it again. No flying fish appeared in the Pacific, so that research project had to be abandoned for the time.

Mud Fences

About one o'clock July 8th we landed at Callao, the port of Lima. The ship remained there until 5 p. m. next day, so we all went to Lima for the night. We would have been compelled to remain ashore even if our ship had been ready to leave at midnight, for the Peruvian law does not allow anybody to go back to the ship after 5 p. m. The intent of this law is said to be to keep strangers over night so that they will patronize the hotels and merchants of Lima and Callao.

We went up to Lima, about eight miles, on the trolley. A fertile but narrow plain, all irrigated, lies between the mountains and the sea. Bananas, alfalfa, corn, Sudan grass and a variety of vegetables are all growing luxuriantly. The corn fields looked good to me as did those of Southern France when I was far from home. The fences are all adobe, some of them made of mud bricks but most of them of big mud blocks. I have heard the expression "as ugly as a mud fence" ever since I can remember, but these are the first real mud fences I have ever seen. Incredible numbers of livestock are pastured in these mud-fenced fields. I counted 48 horses and cattle in a field which other members of the party estimated at four acres.

The ancient wooden plow, drawn by oxen, is in use on this fertile plain. The Peruvian, like the Mexican, favors a plow with one handle and that is the kind he uses, whether ancient or modern. The farms and gardens were generally well kept. One crop we could not identify, but I will not attempt to describe it. A few olive trees are seen, some of which must be of considerable age. Perhaps the olive is the longest lived of any cultivated tree—two or three centuries is not old age to the olive.

Lima is a city of about 250,000. It is a combination of new and old in several respects. In streets, in buildings, in stores and even in customs, Pizarro, the founding who conquered an empire and established Spanish rule over a continent, decreed that a city should be built here. He called it the City of the Kings, and it is so called today, but it is known as Lima, the capital of Peru.

Nearly four centuries have passed since Pizarro planned his city and laid the cornerstone of its

Cathedral, but he is still in it and of it. For his body rests in the Cathedral which he established and may be seen by all visitors. The features are gone, only the skull remaining, but the trunk and the legs are well preserved by the ancient embalming. I tried to discern the marks of the swords of his assassins, but the light was poor, in fact we had no light except what we got by striking matches, and I could not see any marks on the body.

The Wealth of the Incas

Few men have had a more romantic life than this Spaniard of unknown parentage. He went on from one great adventure to another, the climax his conquest of Peru, then an empire of about five millions and rich beyond even the conqueror's dreams. Nobody knows how much gold and silver Pizarro got from the Inca sovereign Atahualpa; but it is recorded that he demanded a large roomful of gold for the Inca's ransom. This was granted and delivered, whereupon Pizarro demanded an



Criticism that agricultural colleges tend to educate farm boys away from the farm instead of back to the farm is common. This is not the case with Francis Edsall, a freshman at Rutgers this past year. The College and the Sussex County Bankers' Association aided him in conducting a profitable poultry business at the College farm while in school. His flock made a college education possible.

other roomful. This, too, was delivered, but Pizarro broke his word, kept the treasure and killed his captive. So we don't shed any tears as we visit Pizarro's tomb and remember that he died as he had lived—by the sword.

The rest of the afternoon we spent in looking over the halls of the two branches of the Peruvian congress. The senate chamber is the older and is notable for its wonderful carved ceiling of wood which we took to be mahogany. Our guides told us that this carving is ancient Peruvian work and not of Spanish origin. They said it is about 600 years old, but this is doubtful, for they sometimes say what they think the observer wants to hear. If it dates beyond the advent of the Spanish nobody knows how old it is but probably it doesn't. The Torre-Tagle Palace charmed us with its ancient furniture, also one notable painting by Rembrandt. The wood carving is beautiful and so are the tile in the patio—all the work of old masters whose names are unknown.

Relics of Ancient Culture

The Inca Museum, well, perhaps I should not mention it, for our stay was too brief to allow us more than a glimpse of its treasures. I hope to visit it on the way north and will have more to say if this is possible. But the collection of ancient Peruvian pottery is simply marvelous, and it indicates not merely civilization but a high development of art.

One thing strikes us forcibly as we roam the streets of this ancient city. The people are nearly all short. In one assembly of several hundred I was able to look over the whole crowd and see the man about whom they assembled to hear a

patriotic speech. The taller members of our party towered away above the Peruvians, who were seen to turn and look at these giants from the North. The morning of our second day in Peru I spent in the market-house—but that is a story in itself.

Boy Takes Hens to College

"EARN while you learn" is not a new slogan, but to bring a poultry flock to college with you and make it pay your way through school is something different. That is what Francis Edsall, a Sussex county, N. J., boy, did when he entered Rutgers last fall as a freshman.

Now Francis did not keep his flock of 120 birds in his room at the College dormitory, nor any other such place. Instead they were housed in a modern poultry house on the College farm which was erected by the Sussex County Bankers' Association several years ago for just this purpose. Several of these houses have been built by county bankers' associations in order that Four-H Club members and students in vocational agriculture might continue their poultry projects after entering the College of Agriculture at Rutgers.

Francis tells how he first became interested in a poultry project during his junior year of vocational agriculture in the Sussex high school. That year he started with 250 baby chicks and raised 120 pullets which made him a fair profit.

The following year his agricultural instructor, R. B. Dickerson, urged him to continue his poultry project and plan to attend Rutgers upon graduation. His first thought of attending college came when he learned that the Sussex County Bankers' Association had built a poultry house at the College farm for the use of any Sussex county boy who wished to bring birds there to help pay his expenses.

"When Mr. Dickerson first told me about taking birds to the College, I thought the idea a little far-fetched, but after considering it carefully with him and my parents, I decided to try it. I applied for the house and was told that I could have it. Then I purchased 200 chicks from a reliable breeder and from these I raised 120 fine pullets. When September came I loaded them on a truck and brought them to New Brunswick, put them in the house and enrolled as a freshman agricultural student in the College," he explained.

Caring for his flock did not handicap him in his studies and it has given him an added interest in the poultry business. In fact, this fall he plans to bring enough pullets to fill two houses. Profit on his college flock, plus the sale value of the birds, for the year ending April 1 was about \$400.

When Francis was home for his spring vacation he received a consignment of baby chicks. He placed these in brooders where they were cared for by his parents until he returned for summer vacation.

Coal Ashes for Crops

WE are told that coal ashes is very low in plant food. Perhaps this is true, but the chemist considers only nitrogen, phosphoric acid and potash.

It may not be the plant foods usually valued that show up favorably in the coal ashes, but I have noticed marked benefits from the application of coal ashes. A friend applied coal ashes to half of a field which he sowed to clover and timothy. The result was that his clover and timothy crop was about half and half as far as the coal ashes went, but where there was no coal ashes there was no clover. The timothy was about the same all over the field.

Last spring on part of a field where I had sowed timothy and clover the clover plants looked very small. I scattered a few loads of coal ashes over this part and in spite of the extreme drought this year the clover took on new life and was much better than anywhere else in the field. Nicholas county, W. Va. A. J. LEGS

The Skokums of the Allegash

By Holman F. Day

Copyright, 1907, by Perry Mason Company, Boston, Mass.

SYNOPSIS

The Mayor of Toban Jaws is the title, given in fun by the rough drivers who direct the stream of logs down the river, to the "runt" of the gang who is left alone all season to watch a ledge and prevent logs piling up there and causing a jam. This job falls to young Shain Searway on his first trip with the river men. As first very lonesome he learns to like the river and enjoys occasional visitors who use it as a thoroughfare. One of these is Ed Doody, a man who shows a nod to find treasure with and induces Shain to accompany him in search of a fortune. Leaving Doody's former partner, much against his will, to guard the Jaws and prevent a log jam, young Searway prepares for his great adventure.

boards covered with sheathing-paper, but the other houses were made of logs.

"Dirty Donald's place," was Doody's brief statement, "and there's Donald himself coming down to the landing."

The tall, gaunt man, with sandy whiskers, thrust out his hand as the canoe approached and eased the craft upon the shelving beach. He held it till Shain had stepped ashore, and as the young man noted the grimy hands and the ragged garments shining with grease, he understood how Donald got his nickname.

The greetings between him and Doody were more curt than even woodsmen usually affect, and then they followed him into the house with their duffel swinging from their shoulders. The several men, who were loafing on the wooden benches, or "deacons' seats," that were ranged round the main

The Cheerful Plowman



OLD BUT ENTHUSIASTIC!

HE'S ninety-six and better, yet let me tell you, Jim, Old Age has put no fetter or halter-shank on him! The old boy's full of spices, of ginger and of pep, he wears no frowns or splices, there's rubber in his step.

"I'm planning out my gardens," he said to me one day. "This gumbo surely hardens when moisture stays away. Just notice how this berry is growing red and ripe. Say, by the shades of Harry, I cannot find my pipe! This bed of mint I'm spading, I'll seed the thing to cross. Gosh, how that grass is blading, it's just the kind, I guess. Next time I go to Gowrie I'll get some spineless peas; my neighbor, Mike Mullowrie, is bringing me some peas."

"Just see this spruce I've planted in filling out the rows. The thing must be enchanted, I judge, the way it grows. Ten years from now come over and let me show you then my acreage of clover: each year I'm adding ten. These apples here are dandies, they're just as sweet, I vow, as any modern candies, as broom corn in a mow. And inside this rhubarb, neighbor, I've planted the land! It took a heap of labor with brain as well as hand to bring that up, by golly, to where it is today. These carrots sure are jolly, I always make them pay."

"Come in and have some dinner, a lunch with me, my friend, I know I am a sinner, a sinner from end to end, but, by the saints, my cooking is just as fine, I swear, as that at Hotel Brookline or Cafe Valdevan."

"Enthusiasm! Listen! That man will never die. His eye has all the glister of anybody's eye! His mind is just as busy with plans for years ahead as is my mind. Oh Lizzy, Jehosaphat, and Ned, I hope when I am sixty I'll have one-half the pep that Old Man Asa Bixby now carries in his step. He's ninety-six, I know it, but ninety-six, or nay, he doesn't show it—he's still a youth today."

J. E. T.

room, eyed the stranger carelessly, and grunted good-humored salutation to Doody.

No one seemed to be inclined toward conversation. One by one the men rose, yawned, stretched with upthrown arms, and sauntered outdoors. Each picked up a chip in the dooryard, pulled out a jack-knife as he strolled, and began whittling.

Shain, sitting by the window, noted that each, after a little detour, arrived at an upturned bateau, that had been pulled inland several rods from the river, and lounged against it idly, still whittling.

Finally Doody went out, swung carelessly through the broad dooryard, and brought up at the bateau.

Lastly the host himself, taking down a tin box of tobacco and refurnishing his pockets with matches, sauntered forth, walked to the river, looked up and down, and then returned toward the house by way of the alluring boat, against which he leaned placidly.

It was lonely in that bare room, where there was no sound except the ticking of a battered nickel clock. The men outside appeared to be having a comfortable chat, and Shain rose and strolled out toward the bateau, also. When he leaned against it and pulled out his jack-knife, the men, one after another, glanced up, glowered, and stared down once more at their whittling. They ceased the hum of conversation that he had heard as he came up.

This curt behavior was both mortifying and surprising, but the young man, conscious that he had committed no intentional fault, endeavored to display his own sociability.

"I suppose it's been a long time since there were Indians living along the river here?" he observed to "Dirty" Donald.

"Injuns!" snorted the tall man, through his tangle of whiskers. "Injuns? Why, up to two years ago they was so thick round here, and so ready with their arrows, that you couldn't walk from one end of this clearin' to the other without gettin' to look like a school-ma'am's pincushion—assorted sizes and lots of 'em."

SHAIN observed that the men were peering at each other with covert grins. Donald's voice grew shrill in apparent excitement, and he clacked his knife shut and began to dance about.

"It was less than a year ago," he cried, "that old Musquohock himself came tearin' out of them woods one day! I was standin' right about where you are now." He ran back a little way toward the edge of the clearing. "Old Musquohock he came out, and he jumped up and cracked his heels together." Donald tossed up his scrawny arms and leaped into the air. "He let out a war-whoop that you could hear two miles." He squallied shrilly, leaped again, and came running at Shain. "This is the way he come at me!" he shouted, flourishing his arms above his head. "Savage Injun! He grabbed me by the scruff of the neck, like this, and he started with me straight for the river, like this!"

The young man, not understanding whether it would be woods etiquette to resent being thus used to illustrate a story told for his benefit, went along without resistance. When they approached the river, he strove to hold back, but the muscles of Donald were like steel, and he kept his victim on the run. With a hoot like a siren whistle and with a last mighty shove, he threw Shain heels over head from the bank, and went back to the group of men who were staggering about, shrieking their laughter.

"Next time you bring a spike-horn along with you, Lad," he remarked to Doody, who had eyed this procedure with disfavor, "you tell him that stickin' in noses ain't relished by gents up this way, but that Injun stories is."

"That wasn't noways a square deal!" growled Doody. "He wa'n't bracin' in nor intendin' to."

Shain had crawled up the bank and was gazing reproachfully in their direction.

"You could have let me tell him to go away," continued Doody.

"Yes, and then have him wondering what the secrecy was about!" retorted Donald. "I say you ought to have left him up-stream till this meetin' was over."

"He's got the right sort of stuff in him," insisted Doody. "And I've sized him up well enough to guarantee that it would be all right if we should take him right in now."

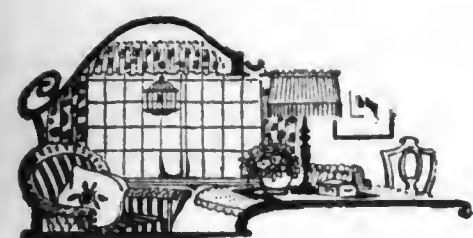
All the men glowered at him.

"I tell you, when a chap has the stuff in him you can tell it," cried Doody.

"And after your chap has got the stuff in his ears he can tell it, too," broke in Donald. "No, not for us, Lad! Give your cub the three months' swing, try him out, and if he lines up with us, then the Skokums will give him something else besides Injun stories and cold-water treatment. Let him sit over there and guess what it's all about. If he comes back here I'll break him in two. Now let's get down to something sensible."

When the dusk came over the trees, they were still lounging against the upturned boat, and at last they surrounded Donald, who, at Doody's dictation, figured away in a smooched account-book.

(To be continued.)



The Farm Home

Home-Made Farm Relief

By HEPSY NEFF

IS America the product of pioneers or are pioneers the product of America? Both. The pioneer spirit was and is a conquering spirit. "Subdue the earth," was the great command. Men who can do this, even in a small degree, respect each other. Failure brings lack of confidence and loss.

Primitive man called work a curse. The Son of man, the God-Man, said: "My Father worketh hitherto and I work." Today we know that work is a blessing, a life-giver for humanity, man and woman alike. The loss of the pioneer spirit, of joy in work, in service, means confusion, chaos, degeneracy.

What is back of our treasured samples of homespun, the work of our pioneer mothers? Theirs the happy adventure, the joyous, creative work and a real sense of service so mutually satisfying that there was no room in the pioneer home for discontent or selfish ambition; instead, every stimulus for the development of mind and character. Neither the pioneer woman nor her loyal mate, carving with his own hands a future for his family, need our pity. It is we who are in need and should crave a share in their spirit, their vision, their rich endowment of independent thinking and living.

A Pioneer Field

But our world of today is a different world, a machine world. Money can buy anything except health and a home, the only place in which health and character can be built. For the young women of today this is a pioneer field, an undiscovered country which only woman can conquer and possess. The best minds of today are seeking the means to this end but only woman can use them. Does the pioneer spirit still live?

Some one has said: "An ounce of inspiration is worth a ton of perspiration." What is inspiration? The air, the atmosphere which wraps our earth, is necessary to life, but it can do us no good until it gets into our lungs. We must breathe it in—inspire. Push it out—expire. Only then can it give us life.

The two most inspiring words in any language are home and mother. The highest and holiest instincts of humanity center in the home and family. When the mother of James A. Garfield sat on the platform with him while he took the oath that gave him the highest office known to the world she was in no sense a symbol of inferior womanhood, instead, a symbol of superior and glorious privilege. She had helped to place her son where he stood, just as every woman and mother may build character as no one else can. But, like the air, the inspiration that builds character and makes a home must be felt, it can be seen or known only in its effects.

Home is a woman's world and only as she masters her world as man has mastered his world can she stand on the high level of a master. The business world is asking for more trained executives. Clerks there are in plenty; common workmen too many, but capable executives few and this lack, they say, is the cause of multiplying failures in the business world. May it not be equally true that the same lack of trained managers in the important field of homemaking is the cause of multiplying failures and disasters in the human world?

Comfort, Service, Suitability

It was once the writer's good fortune to have as neighbors several officials from a great retail store with branches in many cities. Among these officials was the director of women a rare and highly trained woman whose farm home once adjoined mine. I have waited for hours in her outer office on the ninth floor while half a dozen out-of-town merchants asked her advice and studied her methods for promoting the ideals of health and good taste in dress among their women employees. The core of her advice was comfort, service and suitability. This woman had many calls from women's organizations of all kinds and to these she carried her gospel of health and good taste in dress, demonstrating it with the best samples the great store had to offer and her audiences furnished the children, girls and women needed as models. It was a great privilege and few of us

who listened failed to find many mistakes to be corrected. But if big business finds it profitable to establish rules for health and right living how much more we of small and uncertain income.

The homemaker who aims at success as an executive will find herself in good company if she follows the ideals given above, adding economy of both time and resources to the rules she adopts. A table crowded to the limit with meats, starchy foods, acids in both fruits and vegetables, sweets and pastries, is outside the best standards of health, good taste or economy. If half the time used in preparing meals that contribute nothing to health and much to disease were spent in seeking to understand real food values and their place in building health the farm relief problem would soon begin to shrink.

There is no high level of success in any field today that is being held without a constant study and search for newer and better methods of gaining the best ends. More and more our woman's colleges are recognizing a growing demand for real training in preparation for the place in the home. Among these are Vassar College and the American School of Home Economics. Here is the

latest word from the man who stands at the head of the latter school:

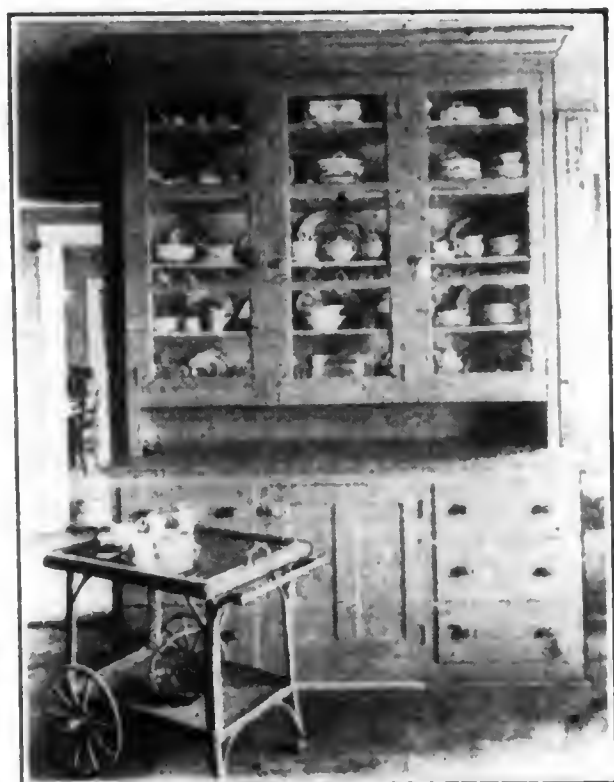
"There is no profession that compares with the profession of homemaking in the possibilities for improvement of the race—physical, mental and moral. The millennium waits upon the perfect home. . . . It is for you club women to take the lead in this movement, for advancement must come from above. You have the chief care of the life, the health and the happiness of the family. Thousands of homes are wrecked, tens of thousands of lives are ruined and hundreds of thousands are made unhappy because the homekeepers of our country have no real training in the greatest of all professions, the profession of homemaking and motherhood. . . . and only through education and training can present domestic difficulties be solved and the modern home contribute what it should to happiness and well being. The homemakers of America hold in their hands the fate of the nation."

The efficiency experts earn good salaries in industry merely by finding and cutting out all wastes either of time or material. Not the least of our permanent gains in copying the methods of big business will be a new independence of spirit which will mark us as outside the "follow-the-Joneses" class. In short, the farm home-maker who is ambitious to become a trained executive holds in her hands nine-tenths of the means by which real farm relief may be realized.

A Step Saver in the Kitchen

WE would all like to have houses so that the arrangement of the kitchen and its relation to the rest of the house suited our particular way of working and ideas of convenience. Many of us, however, must get along with houses designed without much regard to step-saving. Very little, apparently, can be done to reduce the walking necessary in a badly planned kitchen.

A medium-sized wheeled tray is a practical aid



in such cases. In homes where the dining-room and kitchen do not connect directly or where the work centers are not arranged in the best order it will save many steps. It can be used as a movable work table in the kitchen. Instead of carrying a few dishes and other articles at a time from one part of the kitchen to another, or from the kitchen to the dining-room and back again, the wheeled tray can be loaded and pushed from one room to the other in one trip. It is especially helpful in a large family where many dishes must be handled.

A simple type of wheeled tray can be made at home by any man or boy handy with tools. Such a tray might be stained and waxed, or finished with enamel paint so it can be easily washed. All wheeled trays are equipped with a shelf at axle height which doubles the available surface. Noiseless swivel casters are generally used so the tray will move in any direction easily. The dimensions of the tray should be such that it will pass readily through doorways and between various pieces of furniture in a room.

The wheeled tray or "tea-wagon" or "tea-cart" as it is variously called, is also a great help in serving afternoon tea. Sunday suppers in the living-room, or party refreshments. The one shown in the illustration was photographed by the U. S. Department of Agriculture in a farm home in Massachusetts. It is intended to be brought into the living-room to serve a strictly utilitarian purpose between the kitchen and dining-room. It is made of wicker, with a movable glass tray for a top. In the stores one often finds tea wagons or wheeled trays of finely finished wood and with sides which can be raised to extend the serving surface.

If the wheeled tray is set near the hostess or homemaker at the dinner table it can be used in place of a serving table or buffet. Vegetable dishes, extra plates and silver, and other accessories to the meal can be put on it to make more room on the dining-table. A course can be changed without the homemaker's leaving the table, if the soiled dishes are stacked on the shelf of the tea-wagon. In the sick-room, too, the wheeled tray has many uses as a bed-side table.

Cheese Recipes

Fluffy Cheese

MIX one tablespoon corn starch, one teaspoon mustard, one-half teaspoon salt and a dash of paprika. Cream in one tablespoon butter, add one cup cheese cut fine, and one cup sweet milk. Cook until smooth, remove from fire and beat in the beaten yolks of two eggs. Fold in the beaten whites of the eggs and serve on toast.

Cheese Canapés

CUT day-old bread in one-quarter-inch slices and shape with small biscuit cutter into rounds. Spread lightly with French mustard, sprinkle thickly with grated cheese and over this scatter fine chopped olives. Arrange on plate, set half a stuffed olive in center of each canapé, garnish with parsley and serve.

Cheese Pudding

CUT one cup buttered bread in inch squares. Put a layer of this bread in bottom of casserole, cover with grated cheese, dust with salt and a few grains of red pepper. Beat two eggs, add two cups sweet milk, pour over the bread and baked in moderate oven. Serve hot.

Delicate Cheese

MIX one cup cream cheese with one-half cup chopped almonds, and the same bulk of any rich preserve. Set away in round or oval mold for two hours. Sprinkle saltines with grated cheese and put in oven to brown. Remove molded cheese to center of serving dish, surround with toasted saltines and serve.

L. M. Thornton.



Ten Popular Designs

- No. 6909.—Ladies' suit. Cut in six sizes: 36, 40, 42 and 44 inches bust measure. Size requires 2½ yards of 34-inch material. To line the coat requires 3½ yards of 36-inch material. Price 15¢ or two for 25¢.
- No. 6926.—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. A 10-year size requires 3½ yards of 36-inch material. The collar and the four inches wide with yard of contrasting material 35¢, cut crosswise. Price 15¢ or two for 25¢.
- No. 6903.—Girls' dress. Cut in three sizes: 8, 10 and 12 years. A 10-year size requires 3½ yards of 36-inch material. To finish the armsy edges with bias binding requires 1½ yards 1½ inches wide. 1 yard of ribbon is required for bows shoulders as illustrated. Price 15¢ or two for 25¢.
- No. 6913.—Ladies' dress. Cut in six sizes: 36, 40, 42 and 44 inches bust measure. 36-inch size requires 4½ yards of material. The revers, facing of lining material requires 1½ yards 39 inches wide cut crosswise. Two yards of ribbon are required for lining on sleeves. Price 15¢ or two for 25¢.
- No. 6923.—Boys' suit. Cut in four sizes: 4, 6, 8 and 10 years. A 4-year size of one requires 2½ yards of 10-inch material. The trousers of contrasting material requires 1 yard of 10 inches wide. The suit requires 1½ yards of 10 inches wide.
- No. 6922.—Ladies' morning frock. Cut in four sizes: 36, 40, 42 and 44 inches bust measure. A 36-inch size requires 1½ yards of 36-inch material. The width of the dress at the lower edge with fullness extended is 2½ yards. Price 15¢ or two for 25¢.
- No. 6931.—Girls' dress. Cut in three sizes: 8, 10 and 12 years. A 4-year size with the collar requires 2½ yards of 32-inch material. Without the collar about 1½ yards less material will be required. The ends of ribbon require 1½ yards. Price 15¢ or two for 25¢.
- No. 6902.—Ladies' morning frock. Cut in eight sizes: 36, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 36-inch size requires 2½ yards of 36-inch material. To make belt and pockets of contrasting material requires 1½ yards 35 inches wide. The width of the dress at the lower edge with fullness extended is 2½ yards. Price 15¢ or two for 25¢.

HOW TO ORDER

Write plainly, giving pattern number and size. Address: Pattern Department, Pennsylvania Farmer, 730 Penn. Ave., Pittsburgh, Pa.

TWO HELPERS INSTEAD OF ONE IN EVERY BAR

That's why

FELS-NAPTHA WASHES QUICKER—EASIER IN TUB OR MACHINE

Do you use a tub?—Fels-Naptha will save you hard rubbing.

Do you use a washing machine?—Fels-Naptha will save you time and power.

And either way, it will get your clothes so sweetly fresh and bright—so crisply, thoroughly clean—you'll take greater pride than ever in your washes.

Fels-Naptha does such good quick work because every bar brings the aid of two fine cleaners. Soap, the dirt-remover, and naptha, the dirt-loosener. Working hand-in-hand, they give you extra help. Together, they quickly loosen stubborn dirt and wash it away without hard rubbing. And that's why Fels-Naptha is the real bargain in washing value—it brings you not more bars, but more help! It saves YOU!

Fels-Naptha saves your hands, too. That's because it works so quickly you

don't have them in soapy water so long. Try Fels-Naptha. In tub or machine. For soaking or boiling. In hot, lukewarm or even cool water. Use it for household cleaning. But use it—and get extra help! Ask your grocer for Fels-Naptha today. The 10-bar carton is very handy.

SPECIAL OFFER—We'll be glad to send every user of Fels-Naptha Soap a Fels-Naptha Chipper. Many women who chip Fels-Naptha into their washing machines, tubs or basins find this chipper handier than a knife. Use it and Fels-Naptha to make fresh, golden soap chips (that contain plenty of naptha!) just as you need them. Send only a two-cent stamp to help cover postage, and we'll mail you this chipper without further cost. Write today. Dept. 7-8-16, Fels & Company, Philadelphia, Pa.

THE GOLDEN BAR WITH THE CLEAN NAPTHA ODOR

FELS-NAPTHA

10% CUT
FROM CATALOGUE PRICES
FOR SHORT TIME ONLY
You can deduct 10% from any price listed in our catalogue.

Our "Royal" Modern Bathroom
Includes Bathtub, Porcelain Toilet and Enameled Wash Basin. Complete with all Fittings and Five-Year Guarantee Materials.
Was \$52.50, Now \$47.25

WE PAY The Freight on Everything
Write for FREE Catalog 90.
J. M. SEIDENBERG CO., Inc.
254 West 34th St., New York

A New Member of the Cuticura Family
CUTICURA Shaving Cream
A beard-softer and a skin-softener combined!
At all dealers or sent postpaid on receipt of 15¢. Address: Cuticura Laboratories, Malden, Mass.

QUICK RELIEF
INSECT BITES
Antiseptic Japanese Oil takes the sting out of insect bites, stings, cuts, scratches, etc. QUICK relief from all pains and aches. 48 Years Success. At Drugists.

Read the Advertisements
they help you get the most out of life and save you time and trouble doing it.

Summer Bargains

Now is the time to order your reading matter for fall and winter. On monthly publications it requires from four to six weeks to get your magazine started and by that time the evenings will be longer and the weather cooler.

Below are listed a few special bargains. If you do not find the magazines you want send us your list and we will quote you rock bottom prices.

CLUB A	
Pennsylvania Farmer.....	ALL FIVE
Mother's Home Life.....	ONLY
Everyday Life.....	\$1.00
"OK" Poultry Journal.....	
Household Magazine.....	
CLUB B	
Pennsylvania Farmer.....	ALL FIVE
Household Guest.....	ONLY
Farm Mechanics.....	\$1.00
Everyday Life.....	
Household Magazine.....	
CLUB C	
Pennsylvania Farmer.....	ALL FIVE
Midwest Fruitman.....	ONLY
"OK" Poultry Journal.....	\$1.00
Everyday Life.....	
Mother's Home Life.....	
CLUB D	
Pennsylvania Farmer.....	ALL FOUR
Delineator.....	ONLY
Mother's Home Life.....	\$1.50
Everyday Life.....	
CLUB E	
Pennsylvania Farmer.....	ALL FIVE
Pictorial Review.....	ONLY
Household Guest.....	\$1.90
Everyday Life.....	
Household Magazine.....	
CLUB F	
Pennsylvania Farmer.....	ALL FIVE
McCall's Magazine.....	ONLY
Everyday Life.....	\$1.90
Mother's Home Life.....	
Household Magazine.....	
CLUB G	
Pennsylvania Farmer.....	ALL FIVE
Mother's Home Life.....	ONLY
Midwest Fruitman.....	\$1.00
Household Magazine.....	

Send all orders to
PENNSYLVANIA FARMER
PITTSBURGH, PA.

THE YOUNG PEOPLE

Novel Wire Dolls

DOLLS of any size may be made with wire foundations. The length of the arms and the size of the head should be in proportion to the height of the doll. Proportions, however, need only be reasonably exact. The correct proportions of the human figure may be used as a guide:

Top of head to chin—one-eighth full length measurement. Chin to waist—one and three-fourths times head measurement. Waist to feet—five and one-fourth times head measurement. Arms held straight out and measured across, same measurement as from top of head to feet.

Crepe Paper and Cotton Head.—First, decide upon the size of the doll; then make the head in proportion. If the doll is to stand eight inches high, the head should measure one inch from the top to the chin. For this size of head, cut across the grain a strip of white crepe paper two and one-half inches wide. Wrap the paper around a small ball of cotton, adding cotton,

to the cotton filling. Cut off the surplus paper at one end only, which will be the top of the head.

Faces.—Draw the features with India ink, following the seven steps in making a face illustrated. First, locate the middle of the face, and just below this point make two dots for the nose. Just below the nose draw a tiny heart, triangle, or vertical or horizontal line for the mouth. Make two curved lines on each side of the mouth. Measure diagonally upward, right and left, twice the distance from the mouth to the nose, and make straight lines for the lower line of the eyes.

Make a "U" upside down over each line. For eye-lashes make very careful "U's" overlapping each other. Make slanting lines for the eyebrows. Make a circle in the center of each eye to form the iris, and a dot or triangle above the center of the iris for the pupil. (The positions of the iris and the pupil may be changed for different expressions). The iris may be tinted with crayon—blue or brown—or it may be made black with India ink, leaving a small white speck in each eye for the pupil. Draw lines for the hair, as shown in Step 7. Apply rose or red crayon delicately to the mouth and the cheeks for color. A little purple crayon over the eyelashes will improve the appearance of the eyes.

The circles outlining the faces are used only to illustrate the position of the features. They should not be shown.

Ridiculous Figures

Grotesque faces may be used on lollipop dolls or on any dolls dressed to represent clowns or other ridiculous figures. The mouth may be exaggerated with straight lines on each side at right angles. It may be drawn round or square, or shaped like a diamond or a triangle; or pieces of black or colored paper may be cut in such various shapes and pasted in place. Patches may be drawn with crayon or cut from paper and pasted on the cheeks, chin, or forehead to add to the grotesqueness. Such faces may be highly colored with crayon about the cheeks, nose and eyes.

Mat Stock Head.—Cut a circle from white mat stock or white cardboard, or use a round tag of the proper size. Draw the features in India ink or use a printed face, as explained under "Faces" and paste in place. Fasten two three- or four-inch pieces of light weight wire to the back of the head with cloth gummed tape.

Body Structure

China Head.—Use a china bust—which may be purchased at a 5-and-10c store or at a department store—and draw separate ten-inch lengths of light-weight wire through the holes. Bring the eight ends of wire together, and twist tightly below the form. These twisted wires make the foundation for the body.



Hair.—White cotton or black crepe paper may be used for the hair, or the hair may be indicated with India ink. Artificial hair may also be used.

To attach cotton or artificial hair, brush with paste the top and back of the "crepe paper and cotton head" or china head, and arrange the hair neatly.

For crepe paper hair, cut a piece of black (or colored) crepe paper the size of the head; then cut with the grain into fine or coarse fringe, as preferred. Cut the fringe into shape, and curl the ends over a blade. Paste the fringe to the mat stock or lollipop head.

Crepe paper hair may also be pasted on a cotton head in rows, starting at the center top and making a parting along the center.

Body and Legs.—The remainder of the wire doll is made the same for all heads. Cut the body and legs in one piece from heavy wire. For an unusually large doll, use heavy wire. Make one-half inch or one inch loops at each end of the wire for the feet, and wrap the full length of the wire with a strip of crepe one inch wide. Wrap several times in the same direction, and bend the wire at the center to make it double.

Arms. Make the arms the same as the body and legs, using heavy wire. Do not bend the arm wire at the center.

Assembling.—Place the surplus paper of the cotton head, or the wires of the mat stock or china head, under the bend of the body wire, so that the body wire is close up under the head.

Fasten both together securely with spool wire, winding the wire around tight and extending it down two inches or more. Attach the arms in front at the center directly under the head, binding them securely to the body with spool wire. Starting at the neck, with a strip of white crepe one inch wide—or two inches wide for a large doll—wrap the wire for three inches or more, over and over, neatly covering the joining under the head. Continue to wrap the body until it is the desired size. The final wrapping may be in color to serve for part of the dress.

Mounting Dolls.—There are different ways of fastening a wire doll to a cardboard base. When the feet show, punch a small hole through the cardboard on both sides of each foot. Draw a piece of wrapped spool wire up through one hole, over the foot, and down through the other hole; then twist the ends of the wire securely underneath the cardboard. Fasten each foot in the same way.

When the skirt covers the feet, wrap the body wires together to within about two inches of the ends; draw the ends through a hole in the cardboard base, spread the wires out against the under side of the cardboard in the opposite directions, and tape.

ANSWERS TO BERRY GUESSING CONTEST

- | | |
|---------------|------------------|
| 1. Blackberry | 7. Holly berry |
| 2. Mulberry | 8. Elderberry |
| 3. Dewberry | 9. Blueberry |
| 4. Gooseberry | 10. Junberry |
| 5. Raspberry | 11. Thimbleberry |
| 6. Strawberry | 12. Pigeonberry |

Little Folks' Corner

The Housekeeping Adventures of Timmy Twitchet

By RUTH PLUMLY THOMPSON

TIMMY TWITCHET, as I told you a while back, had moved into the old dollhouse that had been sent up to the attic. It was an ideal home for a mouse, so roomy and with so many comforts and conveniences. There were several spare beds and Timmy often had his friends to stay all night. He took great pride in his establishment, I can tell you!

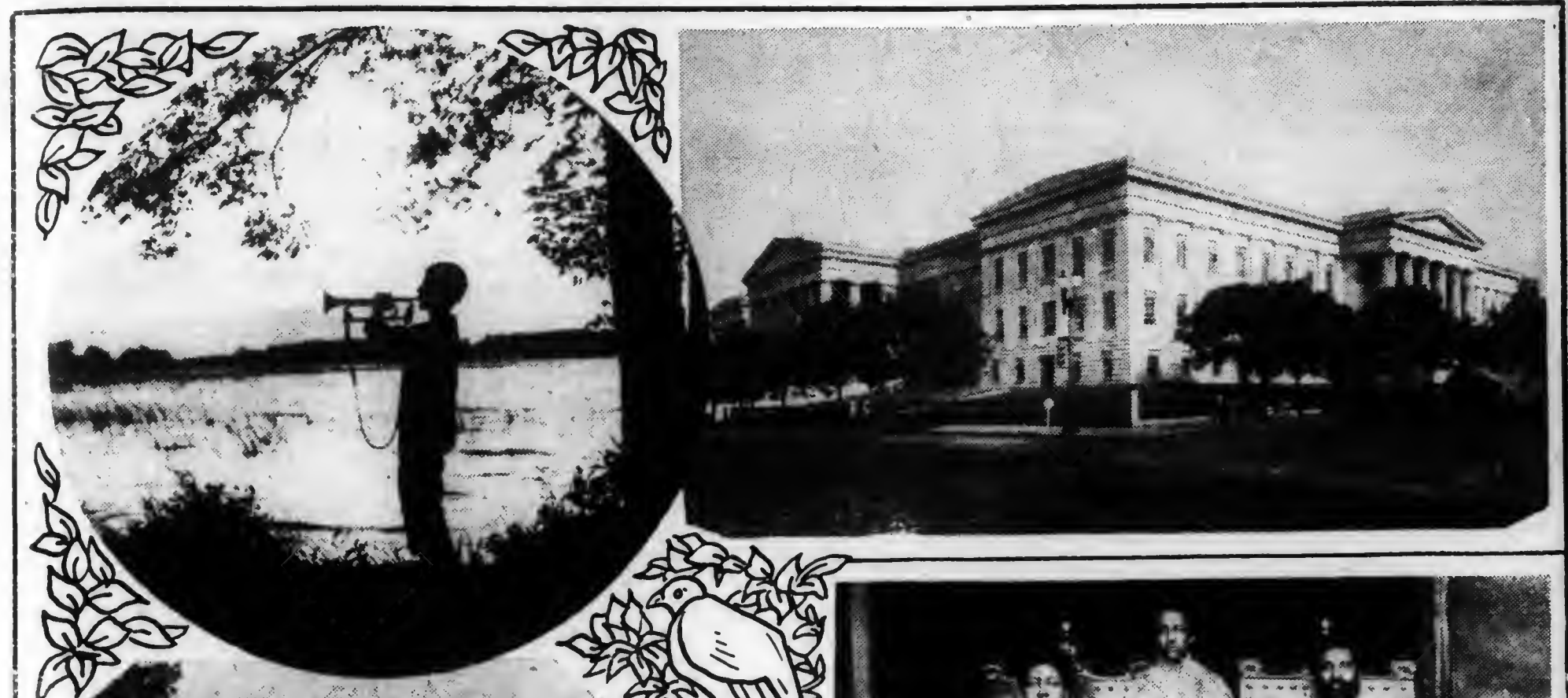
Several of his cousins, who were handy with the needle, had made him curtains from an old white dimity dress that some one had left on a chair in the attic, and there was plenty for bedspreads, too, so you can imagine how cozy it was. Captain Twirler, an old gentleman mouse who had often called on the dolls when the house stood in the playroom, assured Timmy that even in its heyday (when- ever that was) the house had never

been so well kept. And I dare say this is true, for dolls are seldom good housekeepers. More than one bachelor mouse tried to rent a room from Timmy, but as Timmy said he didn't care for boarders, they had to apply elsewhere.

And now that Timmy was so up so well he was invited everywhere by the mouse mamas, who were quite anxious for their daughters to marry a gentleman mouse with such a comfortable home. This was all very well, but Timmy could not seem to find among the young lady mice any with whom he would care to trust his heart and his housekeeping. "They don't know how to cook or mend and spend all their time running to cheese parties," he confided to his friend, Bobby Gray, and they both shook their heads over the frivolities of the day.

(To be continued.)

PASSING EVENTS IN PICTURES



Upper left.—James Sweeney of the Chicago Boy's Club camp at Winnetka Lake has an early job—he blows reveille at wee hours in the morning.

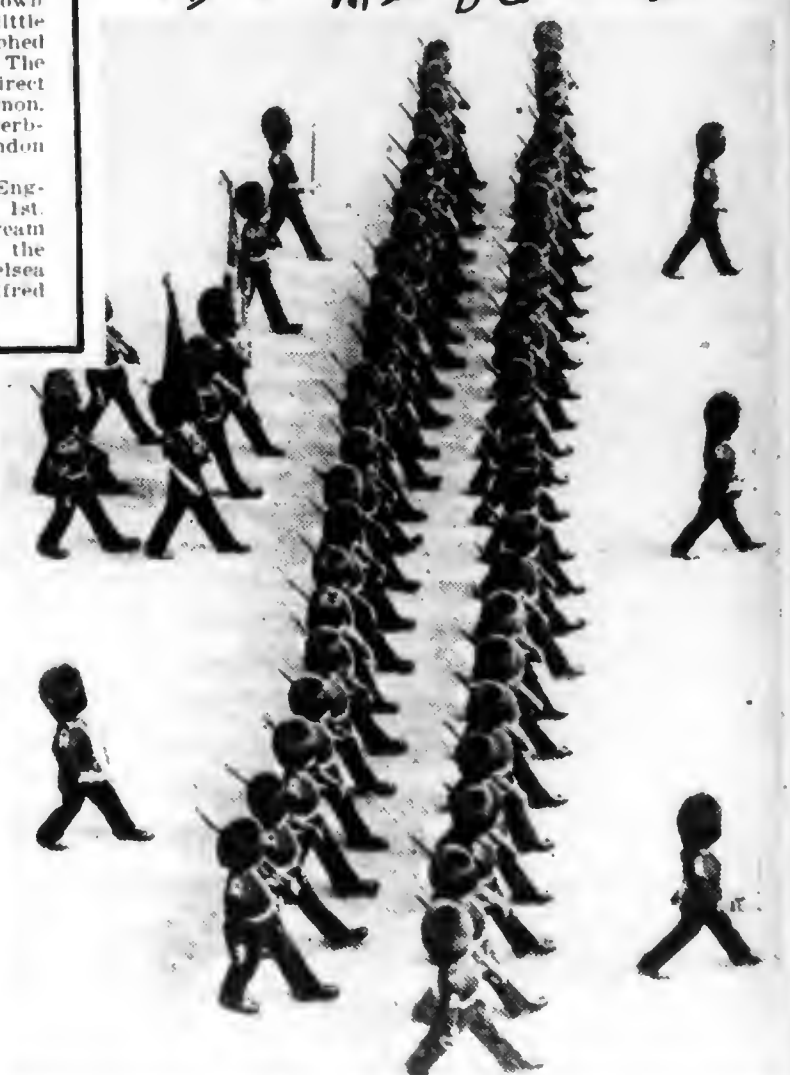
Upper right.—A new record has been set by the United States Patent Office at Washington in issuing 49,599 patents during the recent fiscal year.

Left.—An excellent view of the double fall of Yosemite Falls in Yosemite National Park in California.

Right.—Addis Abeba, Abyssinia.—The latest portrait of the new ruler of Abyssinia, Ras Tafari Makonnen, his wife, the Empress Menen, the Crown Prince Asfaou (center) and little Prince Makonnen—photographed in the Imperial Palace here. The Emperor claims to be a direct descendant of King Solomon.

Lower left.—President Herbert Hoover signs the London Naval Armament Treaty.

Lower right.—London, England.—Pictorial shot of the 1st Battalion of the Coldstream Guards marching during the recent inspection at the Chelsea Barracks by General Sir Alfred Cudington.



USE THIS COUPON TO ORDER INTERESTING BOOKS

Please send me the books postpaid that I have checked below. I enclose the proper amount to cover same.

- | | |
|--|-----|
| How to Make Table Decorations and Favors including wire Doll designs | 10c |
| Games and Stunts for Your Parties | 10c |
| Money Making Bazaars | 10c |
| Showers and Announcements | 10c |

Name

Address

R.D. State

Mail all orders to Party Editor, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

Concrete Silos Soon Pay For Themselves

A well built concrete silo is a good investment at any time, but when pastures are dry, it may pay for itself in a single season. Ask any experienced dairyman, or your county agent. Silage is practically a never failing crop—it can be relied upon to maintain the milk yield through a dry summer. Stored in a concrete silo, it is safe against fire and storm. Send the coupon for free information.

Mail this coupon to office nearest you

Portland Cement Association
1315 Walnut Street
PHILADELPHIA

Please send me your free booklet on Concrete Silos.

Name.....
St. Address (or R. F. D.).....
City.....State.....

Unadilla Silos are Serviced!

When you buy a Unadilla Silo that doesn't tend the transaction. As a purchaser you are entitled to the attention of our service department—a year later or ten years afterwards. No other Silo manufacturer will take this interest in you.

Get the facts why a Unadilla is the best Silo buy today. Let us tell you how to fill your Unadilla and feed from it to get best results. Catalog and prices on request.

UNADILLA SILO CO., Inc.
Box P Unadilla, N. Y.



SAVE AND BUY **ALBA MARL** Nature's Soil Remedy
Quick Acting All Available
Fine as Flour Granulated For
Low Cost Easy Sowing
WRITE FOR GUARANTEED DELIVERED PRICES TO...
ALBA MARL LIME COMPANY, CHARLESTOWN, W. VA.

Reach for ABSORBINE if horses' legs swell

Don't take chances on lay-ups. Rub effective Absorbine on muscles and tendons sore from heavy pulling. See how it reduces swellings due to strains. Never hinders or removes hair—and horse can work. A great antiseptic to aid quick healing. Keep horses earning—get Absorbine. \$2.50 a bottle. All druggists, W. F. Young, Inc., 354 Lyman St., Springfield, Mass.

Buy now. Pay later
A MONEY MAKER
Better feed—lower costs—more profits. Booklet "Users Own Words" written by owners proves it. Write for free copy. Write your name and check below items for illustrated folders.
The Ross Cutter & Silo Co.
109 Warden St., Springfield, O.
Established 1850
Silo... Stall...
Cutter... Blower...
Hoe... Header...

CORN HARVESTER

Best and fastest machine built. One and two row models. One Horse. Carries 200 bushels. Big labor saver. Pays for itself in one season. Worked by 1, 2 or 3 men. No time. No danger. Great for silage cutting. Free trial. Agents Wanted. Write for free catalog.
BENNETT MFG. CO., Box 805 Westerville, Ohio

Navy Brand Concentrated Buttermilk
From Tuberculin Tested Cows
25 per cent milk solids, 6 per cent lactic acid, thick as mustard with no foreign ingredients. Reduces bloating and lessens danger from feed-bots. Increases milk production and promotes fertility and health of stock. Used for silage, broilers and laying hens. Sold direct to you in 50 lb. barrels at about 1¢ per lb. Half barrels, about 300 lbs. Write for prices.
TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, PA.

Cow Feed \$8.00 per Ton with
PHILADELPHIA SILOS
In Wood-Concrete-Tile.
Free Catalogue.
Special Prices Now.
E. F. SCHLICHTER CO.
10 S. 18th St., Phila. Pa.
Tanks, Brooder Houses, Farm Equipment.

C. T. A. Reports

Chester Valley
THE Chester Valley Cow-Testing Association finished their ninth year with twenty-four whole-year members. There were 600 cows in the Association during all or part of the year. The results for the nine years testing are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1922	400.57	6616	278.3
1923	335.82	6970	280.9
1924	363.74	7247	294.6
1925	376.73	8189	283.1
1926	260.66	8011	276.3
1927	445.67	6085	291.0
1928	461.07	6482	313.6
1929	456.07	6996	311.1
1930	528.26	6830	308.7

Fifteen herds with an average of five or more cows exceeded average production of 300 lbs. of butterfat. A complete list of these herds follows:

Owner	Breed	Milk	Fat
Wallace C. Pearson	R.J.	7,801	394.8
James Latta	Mixed	8,188	380.1
Brandywine Meadow Farm	G.G.	8,898	374.1
Harry B. Shenk	R.G.	7,472	373.8
Frank A. Keen	R.H.	11,099	365.5
Mrs. Mary Carter	R.G.	7,175	354.5
Oswald E. Piel	R.J.	6,745	348.6
G. Fairbank Beale	R.J.	6,804	332.7
Edward Hoopes	R.J.	6,183	331.3
James Speirs	R.J.	6,588	326.0
Joseph Snyder	R.H.	5,797	311.6
C. H. Ash & N. K. Beach	R.G.	6,451	309.8
John Kent Kane	R.G.	6,618	309.1
Geo. Thomas, 3rd	R.G.	6,531	304.4
Wm. M. Lloyd	R.J.	5,912	293.1
Warren Shingle	J. S. Oberle		
Tester.	County Agent.		

Warren Critchlow, C. D. Sprout, Tester. County Agent.

Somerset County
THE fourth annual report of Somerset County Cow-Testing Association with twenty-three whole-year and one part-year members; 374 cows were in the Association during all or part of the year.

Below is given the average production per cow of the five highest and of the five lowest herds, and the difference between the two. From the comparison one can conclude that high production is not luck, but management.

	Lbs. Milk	Lbs. Fat	Val. of prod. above
Five highest herds	9358	366.1	\$170.26
Five lowest herds	5431	239.3	99.96
Difference	3927	126.8	70.30

Eleven herds with an average of five or more cows exceed an average production of three hundred pounds of butterfat. A complete list of these herds follows:

Owner	Av. No. Cows	Lbs. Milk	Lbs. Fat
R. S. Maust	7.83	396.5	
F. W. Ross	7.84	389.7	
G. E. Blough	12.83	374.4	
W. H. Barnett	9.53	340.2	
E. H. Smucker	10.91	340.0	
Mrs. Ellen Schockley	12.75	339.6	
L. A. Bowman	8.15	333.3	
W. B. Lense	9.45	322.6	
M. S. Smith	7.67	318.3	
J. S. Giesner	18.52	316.0	
O. W. Beachley	13.01	309.6	
J. Orlo Walker, C. C. McDowell, Tester.			County Agent.

Western Crawford
THE Western Crawford Cow-Testing Association closed its sixth year with 19 whole-year and four part-year members. There were 369 cows in the Association during all or part of the year.

The results for the Association for its six years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1925	132.84	6912	268.7
1926	122.48	7570	287.8
1927	152.07	7517	274.6
1928	152.07	7517	274.6
1929	136.06	7692	280.8
1930	257.25	7863	296.3

Nine herds with an average of five cows or more exceeded an average of 300 lbs. of butterfat. A complete list follows:

Owner	Breed	Milk	Fat
R. H. & T. M. Doidds	Mixed	8327	409.3
Ray McConell	R. & G. H.	11330	361.3
Rose Fitch	R. & G. H.	10173	347.0
C. H. Steadman	R. & G. H. & M.	8991	316.8
Geo. Hazen	R. J.	6564	341.3
N. K. Parth	G. H.	6902	338.4
Paul McMichael	R. J.	6021	336.4
J. S. Patton	R. & G. H.	8577	336.2
Keller Bros.	R. J.	6713	329.9



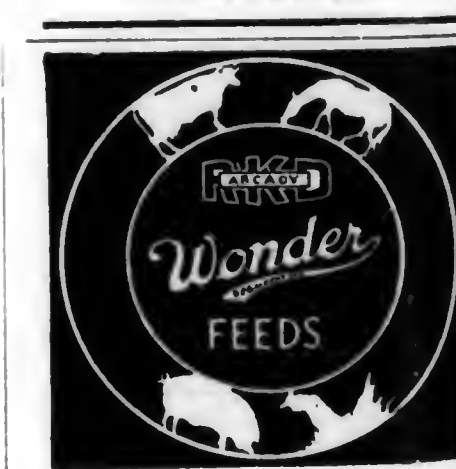
Here's a STOCK SPRAY that Kills and Repels

Preferred by leading dairymen everywhere, Tanglefoot Stock Spray kills and repels flies and other insects—protects cows all day in barn or pasture. It is pleasant to use—never stains, discolors, or gums the hair—and won't burn or blister the hide. Milking and feeding are easier because cows and other animals are unmolested and quiet. You get more and better milk—larger cream checks. Tanglefoot will not taint milk—is powerful, lasts longer, goes farther, works equally well on horses, hogs and other farm animals. Try Tanglefoot. We guarantee you'll like it. Leading dealers everywhere sell this remarkable stock spray. Write for free, interesting booklet.

THE TANGLEFOOT COMPANY
Grand Rapids, Michigan

TANGLEFOOT STOCK SPRAY

Listen in on the Tanglefoot program on WLS Friday evenings, 8:15 Daylight Saving Time, 7:15 Central Standard Time.



Whether it is a dairy feed or a mash for hogs or horses, Arcady Wonder Feeds are the finest you can buy—mixed by special formulas to give your stock and poultry the maximum in feeding. Your dealer carries Arcady Wonder Feeds. See him today or write us direct.

ARCADY FARMS MILLING COMPANY
Dept. 52 Brooks Building, Chicago, Ill.

FREE WRITE TODAY FOR NEW POULTRY BOOK

To know what to buy—read the advertisements. They will keep you informed of the latest and best products of the manufacturers. Their aim is to meet your needs. You will find that time spent in reading the advertisements is time well spent. Read them regularly, with care, and when answering, mention Pennsylvania Farmer.



Above is a general view of the safety bull pen on the farm of H. J. Gregory, Elk county, Pa. A gate from the stable permits the bull to enter the exercise yard and keeps him there while his pen is being cleaned. By swinging the gate to the other side of the pen door the bull is allowed freedom of pen and yard. A leveling rack where a cow can be tied with safety is a further arrangement in the system whereby the bull need never be handled.

A. C. Rockwell,
County Agent.

Pennsylvania's New Milk Law

By RALPH E. IRWIN, Bureau of Milk Control

ACT No. 428 was prepared by representatives of milk producers, milk distributors, milk inspectors, health officers and consumers. The purpose of the Act is to provide the consumer with a clean, safe milk and to promote the use of milk.

The Act does not centralize control in the state. It is rather a "leveling Act" seeking to bring about uniform and practical regulations. For many years each city, borough and township of the first class has had the right to enact a milk ordinance and to provide inspection. This right is not changed as set forth in Section 2 and 11 of the Act. However, in order to provide supervision, the municipality is required to have and enforce an ordinance which at least meets the requirements of the state law. The State Secretary of Health has been responsible for the sale of milk in townships of the second class. The Act now makes the State Secretary of Health responsible for the sale of milk in municipalities without ordinances.

Permits

The operation of the Act is based on the issuance of permits for the sale of milk to the consumer. Permits are issued by municipalities and by the State Secretary of Health. Cities, boroughs and townships of the first class having and enforcing ordinances meeting the requirements of the Act as a minimum may issue permits for the sale of milk within their jurisdiction. In such cases applications for permits may be obtained from the municipal health authorities. Application forms for state permits may be obtained from the State Secretary of Health in Harrisburg. Persons selling milk to a milk plant, an ice cream plant, butter factory, or cheese factory need not obtain a permit. State permits for the sale of milk are issued annually. The first permits become effective September 1, 1930, and expire August 31, 1931. Applications for state permits are to be submitted to the Secretary of Health in Harrisburg not later than March 1st each year.

This is the first law in our state providing for the inspection of all public milk supplies. Those who wrote the Act deemed it advisable to indicate so far as possible the quality of milk desired and give only general directions concerning methods and equipment. For example: in order to sell "raw milk" the cows are to be fed, watered, housed and cared for in such a manner that the milk will be clean and safe. Similar general requirements are given for cooling milk and for the construction of containers and equipment. Thus the producer is given freedom in choosing methods and equipment provided clean safe milk is prepared for sale.

Where Law Is Specific

The law is specific when it requires that milk sold to the consumer as "raw milk" shall be from cows that have been tuberculin tested according to the Individual Accredited Herd Plan or the Modified Accredited Herd Plan (Section 6). Again the law is specific when it requires each dairy farm to have a milk house or a milk room used exclusively for the handling of milk (Section 6 & 7). However, the location, size and construction of the milk house or milk room is given in general terms. When advice is requested concerning compliance with general requirements, an effort is made to indicate how others have been successful under conditions similar to those of the producer or distributor making inquiry.

It is the desire of the Secretary of Health to assist applicants for permits to comply with the requirements of the Act. To do this the state has been divided into nine districts. In each district there resides a milk control officer trained in dairy farm and milk plant work. When the Secretary of Health receives an application for a permit he sends the application to the district representative for a report. In case the applicant is not complying with the requirements of the Act, the district officer indicates what, in his judgment, should be done. If the applicant desires, the district officer will indicate how others have met the requirements.

Section 1 defines an "approved inspector." Such an inspector is eligible for employment by an applicant for a state permit to sell milk. Section 2 requires that after demand by the Secretary of Health each applicant for or holder of a permit shall submit for approval the results of a sanitary inspection of each farm from which milk is obtained and of the milk as delivered from the dairy farm. This inspection is to be made by an "approved inspector" and the results of the inspection recorded on forms satisfactory to the State Secretary of Health.

Two Jerseys

I have two Jersey cows. I separate the milk and lately it has been stringy. What causes it?
Elk county, Pa. — B. A.

STRINGY milk is caused by bacterial organisms. The best plan to eliminate the trouble is to boil all the milk utensils for ten or fifteen minutes. This may be effected by pulling the pails, strainers, the separator bowl and any other utensils that come in contact with the milk in a closed vessel such as a wash boiler. Fill the boiler one-half to two-thirds full of water and allow it to boil for fifteen minutes. A. A. B.



SPEEDS SILO FILLING Cuts Power and Labor Costs!!

SILO owners everywhere prefer the powerful but light-running Papec Ensilage Cutter for its low power cost. As a rule Papec owners find that they can fill their silos with just about 1/3 less fuel.

E. R. Pennebaker, Thompsonstown, Penna., says, "Papec's easy running and no clogging certainly saves fuel and labor. Last year it cost me \$1.00 a load to fill. This year with my Papec and one man, it cost only 20c a load and I got more in my 8' x 30' silo!"

Automatic Feed Saves One Man
See illustration at top—note the wide-flare feeding table and how the Papec cuts up the corn as it comes off the wagon. This automatic feed saves one man's time and wages—and gives big feeding capacity as well.

Easy to Operate
The Papec is quickly set up to the silo. Knife adjustments are easily made. Length of cut is quickly changed—and remains uniform when set. There is a Papec of the right size for your particular need.

\$1,000 Farmers Prefer Papec
There are fifteen thousand Papecs in regular use every season. Many of the owners have never spent a penny for repairs. Papec had to be good to be the biggest-selling ensilage cutter all these years! Sold by progressive implement dealers everywhere!



Send for "Ensilage Facts"
Your name and address on the coupon below or on a postcard will bring you FREE Book of Ensilage Facts and name of nearest dealer. Gives silo and ensilage pointers, illustrates Papec construction and gives important facts on farm use of electricity. No charge. No obligation. Use the coupon. C 197

When writing advertisers please mention Pennsylvania Farmer

**Mr. Dairyman—
You are still in time!**

**Two weeks more of
our big August Contest**
(see ad in July 26th issue).

Hundreds of coupons have been returned.
If yours was not among them,
Fill in, clip and mail the coupon below.

GRANGE SILO COMPANY, Red Creek, N. Y.
Please send me \$10 Certificate to apply on Grange Silo if I decide to buy one, and send details of your special August "World's Series" Contest.

Name.....
Address.....

\$10.

Farmer's Business Letter

A DECIDED change has taken place in the farm situation due to the sharp advance in grain prices. Midwest city newspapers are saying that these advances have meant from \$650,000,000 to \$1,000,000,000 to farmers and are playing it up in big headlines. Thus is an impression created in the minds of business men, and no particular harm in it, though a course every farmer knows that such figures are quite meaningless, because not all grain is sold any one day or week, and not all is sold at all, most of it except wheat going to market in the form of livestock or livestock products.

More significant is the expressed belief that the shortage of corn now indicated will mean the disappearance of the surpluses of other grains, especially wheat, and the partial crop failure may actually mark the beginning of a period of better times for the farmer. In any event, the situation is radically different from what it was even a week ago.

Big Price Gains

Corn has advanced around 30 cents over a month ago, and wheat shows a gain of 12 to 13 cents over the latter part of June. In the case of corn drouth accounts for the rise in prices. The dry area is widespread, and corn raised now from a complete failure, as in parts of the Ohio valley, to a good prospect, as in parts of northwestern Iowa. The situation is spotted but mostly bad. There are sections, however, where rains at once would insure a fair output of corn.

This situation brought the public in to the corn market, all on the buying side, with the result indicated. The wheat gain was in part in sympathy with the corn movement, and in part due to improved buying on export account and also to reports of serious drouth injury in western Canada. Profit taking late this week caused some setback in grain prices, but unless some radical change appears in supply conditions it is the opinion that the higher prices are here to stay. The prospect is now that it will be the smallest corn crop in many years, possibly excepting 1924, when the yield was placed at 2,309,000,000 bushels.

Cattle Still Dull

The cattle market situation shows no improvement, and is not likely to until the western stuff is out of the way. It is thought inevitable that shortage of feed will force a good many head of thin stock in to sell alongside the westerns, thus further aggravating the situation. Call for feeders has been limited, due to losses on cattle marketed this summer and to lack of feed. It would appear now that some reduction in feeder demand this fall is likely.

Cattle on Feed

A government report this week estimates the number of cattle on feed August 1 in the 11 corn belt states as about 1 per cent less than a year ago on the same date. The states east of the Mississippi river as a whole had about 8 per cent less cattle on feed this year than last, while the states west of the river had 2 per cent more.

Light Cattle Favored

Cattle receipts at leading markets this week were a little larger than last week, but still well under the same week of recent years. The demand for light cattle continues better than the demand for heavy steers. The former are 25 to 50 cents higher for the week, and the latter around a dollar lower.

Bulk of steers this week sold at \$8.90, against \$8.25 to \$10.15 last week, and \$13.75 to \$16.15 a year ago.

A spread of \$2.50 to \$3.50 covers the bulk of the feeder offering, with the best at \$7.75 to \$8.00.

Lambs Again Lower

Lambs worked a little lower this week, with the close in about the same notch as a week ago. The combined run at leading points was some larger than last week, and larger than the same week of recent years. So far this year the seven leading markets have received 7,705,000 sheep and lambs, compared with 6,788,000 last year, a gain of over 15 per cent, and last year was a relatively large year in sheep marketing.

The market simply cannot stand up under this burden of supplies, and there appears to be little hope for it, at least until the western stuff is out of the way. Bids, mainly at a range of \$5.00 to \$6.50, have appeared in the futures market for feeding lambs, but so far there have been no corresponding offers, and therefore no sales.

Hogs Bright Spot

The hog market gained 25 to 30 cents this week, mainly on the basis of the corn outlook. This was reflected in the futures market, with the December option showing a moderate advance. Receipts were about like last week and normal for the time of year. Average price for the week was \$8.95, compared with \$8.65 last week, \$10.85 the same week last year and two years ago. Weight of hogs still runs high, the average this week being 255 lbs., against an average of 252 lbs. for the same week of the past five years. Futures offerings indicate that some are expecting hogs to sell up to \$10 in September, and up to \$9 in December. The hog outlook is pretty good, considering the way things stand these days.

Chicago, Aug. 9, 1930 Watson

Produce Market Review

POTATO shipments have dropped to around 500 cars daily and late in the week fully half of these were from New Jersey. Prices are low and average about half of those paid at this time last year. The demand improved at New Jersey shipping points during the latter part of the week and price advanced to a level of \$1.90 to \$2.10 per 100-pound sack f. o. b. Prices of Cobblers ranged from \$1.25 to \$1.50 per 100-pound sack in most eastern cities.

Apples Irregular

The apple market continues unsatisfactory with prices irregular. Transparent, Dutchess and Williams are the chief varieties offered and sell at prices ranging from \$1.00 to \$1.50 a bushel. There are, however, only a few apples that bring \$1.50 and large lots that sell at 25c. The British trade barrier against American apples seems likely to stay for the present, according to current reports, but the crop shortage and drouth make the export prospect less important than in some other seasons. Domestic markets should be able to take over most of the production as now indicated.

Eggs Firm

The egg market during the past week continued in firm position on full line eggs which were very scarce.

NEW YORK

WOOL MARKET

Boston, Aug. 9.—The volume of wool

The prolonged heat wave has prevented any improvement in quality, with many ordinarily fine marks damaged by heat and average offerings showing heavy loss. Dealers in many instances were forced to recandle shipments, particularly those going into critical trade channels.

The demand for good eggs was sufficient to effect close clearance of stock, however, the poorer qualities were difficult to move notwithstanding their disposition to force sales and shade prices. Because of the poor quality of general run stock, jobbers were disposed to work on some of their own storage supplies. Some sales of early June coolers were reported at 27 1/2 to 28 1/2 c. good July marks brought 28c, June whites sold for 30c.

Fresh arrivals of nearby whites sold at 28 to 30c, some henneries commanded 30c, mixed colors 25 to 26 c. Ordinary firsts moved at 21 to 22c. Western stock brought 26 to 27c. Western shippers are firm in their asking prices on account of lessened production caused by intense heat.

Butter Is Strong

The tone of the butter markets during the week was full steady to firm. Prices at the opening were a quarter to one cent higher and some minor fluctuations were recorded, but prices at the close of the week were higher than at the close on Saturday, August 2nd. The chief factor contributing to the improvement in tone was the continued hot dry weather over most of the producing territory. Lighter arrivals of all grades of butter at the four markets and the further reduction of the surplus storage stocks at the ten markets were also contributing factors to the firmness.

Close students of the statistical situation are estimating the August 1st holdings to be from 1,600,000 to 2,350,000 pounds lighter than those of August 1st a year ago. This sharp change from an excess of 14,765,000 pounds on July 1st can be attributed primarily to a lighter "make" of butter this year than during July a year ago.

Considerable storage butter changed hands during the week at prices on a par to slightly under the prices listed for the arrivals of the same grade. Much of this went into consumptive channels, although some was held for speculative purposes. W. R. W.

NEW YORK

WOOL MARKET

Boston, Aug. 9.—The volume of wool

taken out of the market during the past week has not been as large as during the previous week, says the U. S. Department of Agriculture. Market News Service. Prices of worsted style wools, however, remained very firm and on many grades showed slight advances. The most active lines were of 64s and finer and 58s, 59 grades.

Ohio and similar 58s, 60s fleeces (half-blood) were quite strong. Strictly combing staple brought 36c, and French combing 26 to 27c, in the grease. Strictly combing 64s (fine) and finer fleeces were also but prices on limited sales were steady at around 32c in the grease. Demand was dragsy on 56s (three-eighths blood) at unchanged prices. A limited amount of the 50s strictly combing fleeces (quarter-blood) was sold at very firm prices, bringing 24 to 25c. Small lots of 48s and common and braid fleeces were readily moved at 20 to 22c.

Produce Market Quotations

PHILADELPHIA
Butter.—Higher than extras, 39 1/2 to 42 1/2 c. 92 score, 38 1/2; 90 score, 36c.

Eggs.—Fancy select, 56 to 58c; extra firsts, 54 to 56c; second, 52 to 54c.

Poultry.—Live fowls, 14 to 15c; broilers, 15 to 16c; old roosters, 13 to 14c; turkeys, 15 to 16c.

Fruits.—Apples, N. J., 5 to 6c; bakers, 4 to 5c; varieties, 3 to 4c. BLACKBERRIES, N. J., 3 to 4c; CRANBERRIES, N. J., 3 to 4c; PEACHES, N. J., 3 to 4c; early varieties, medium to large, 2 to 3c; late varieties, 1 to 2c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1/2 to 3c. ONIONS, N. J., 1 to 2c; 2 1/2 to 3c. SQUASH, N. J., 1 to 2c; 2 1/2 to 3c. PEPPERS, N. J., 1 to 2c; 2 1/2 to 3c. TOMATOES, N. J., 1 to 2c; 2 1/2 to 3c. OKRA, N. J., 1 to 2c; 2 1/2 to 3c. LIMA BEANS, N. J., 1 to 2c; green, 1 to 1 1/2c. BEETS, Pa., N. J., per bunch, 14 to 15c. CARROTS, Pa., N. J., per bunch, 14 to 15c. CABBAGES, Pa., N. J., per bunch, 14 to 15c. CUCUMBERS, N. J., 1 to 2c; 2 1/2 to 3c. CELERY, N. J., per bunch, 25 to 30c. CORN, N. J., 1 to 2c; 2 1



Alvin B. Blatt,
Bernville, Pa.

"22 bu. more wheat per acre when I used this quality fertilizer"

"THE Swift Certificate of Quality certainly speaks for itself," writes Alvin B. Blatt, Bernville, Pa.

"In 1929 I put in 28 acres of wheat. One half the acreage was fertilized with Swift's Red Steer. The other half was left unfertilized.

"The Red Steer fertilized area yielded 22 bu. more per acre than the rest."

You can be more sure of results like this if you make the Swift Certificate of Quality your buying guide to fertilizers.

Guaranteed analysis can tell you only the amount of plant food in the bag. But the Swift Certificate of Quality on every

bag of Red Steer gives you in addition a definite, dependable assurance of quality.

For it assures:

BEST MATERIALS—plant food from the most productive sources.

DOUBLE MIXED—fertilizer thoroughly and evenly mixed and in good drilling condition so that each plant will get its share of plant food.

TRIPLE TESTED—in modern laboratories, assuring the right plant food in the right form and amount.

Make the Swift Certificate of Quality your buying guide.

Get big yields of plump, premium

wheat, maturing 3 to 10 days earlier. Greater freedom from rust and less winter killing. A good clover catch and more hay.

Ask your A. S. A. (Authorized Swift Agent) for our free booklet on fertilizing wheat. Or write direct to the nearest Swift & Company office listed below.

Swift & Company
Fertilizer Works

Baltimore, Md.

Cleveland, Ohio



Swift's Red Steer Fertilizers

"It pays to use them"

BEST MATERIALS - DOUBLE MIXED - TRIPLE TESTED

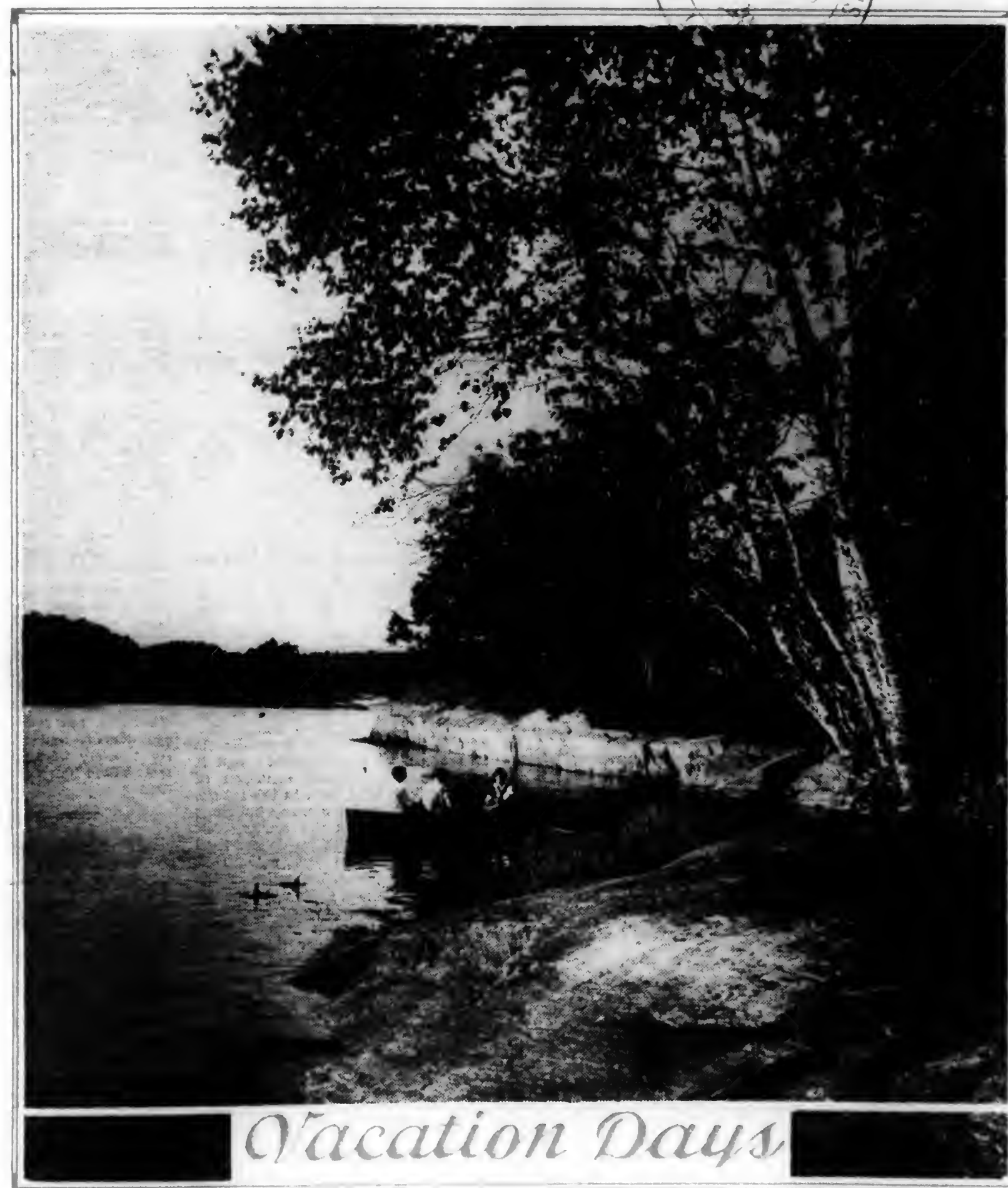
PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

August 23, 1930



Philadelphia

Pittsburgh

Harrisburg

Yours... a \$10 Gift

For choosing your
new Allen Parlor
Furnace now . . .

ORDER your New Allen Parlor Furnace before September 6 . . . get this ten dollar Gift Certificate, good for anything in your Allen dealer's store. Delivery will be made when needed. Payment arranged to suit your convenience.

This ten-dollar certificate is a clear saving to you. And it is only a small part of what the New Allen will save you, first cost, and after that, in fuel cost each year.

Heats all the House

The New Allen guarantees you cozy, healthful warmth in every nook and corner, upstairs and down. It heats scientifically by circulation . . . gives you fireside cheer. Beautiful walnut grain finish.

Act Now

You will soon need heat. Why not take advantage of this free offer now? It costs you nothing extra to do so, and think what you can get with the ten dollar Gift Certificate.

Go to your nearest Allen dealer. Ask him to show you the patented features of the New Allen that no other heating system has . . . have him explain how easy it is to own an Allen. If you don't know the name of your dealer, send the coupon. But be sure to act now—before September 6.

ALLEN MANUFACTURING CO., Inc.
Nashville, Tenn.

Stove Specialists for a quarter of a Century

The NEW ALLEN Parlor Furnace

ALLEN MANUFACTURING CO.
Dept. H15 Nashville, Tenn.

Name nearest dealer who offers Allen's
Gift Plan, also tell all about the Home
Tests you recently conducted

Name _____
Address _____
City _____ State _____

THE ADVERTISEMENTS in Pennsylvania Farmer contain information that is valuable and important. Read them and then answering them mention Pennsylvania Farmer. It will help us and help you.

NAVY BRAND Concentrated Buttermilk

Your Chickens will run to get it.

The most profitable factor of any poultry ration. VERY PALATABLE. Used by most of the large producers. The proof of its value is shown by the number of these producers who use Concentrated Buttermilk regularly for chicks, broilers and laying hens. Navy Brand increases egg production and promotes fertility and hatchability. Navy Brand is pure, has no foreign ingredients, and is made only from milk produced while cows are in pasture. It therefore contains all the beneficial vitamins necessary to poultry production.

Navy Brand is sold direct from the Factory in barrels of about 185 pounds, and half barrels of about 300 pounds. Keep your flocks going right. Fill in the coupon now and let us tell you how Navy Brand will increase your profits.

TITUSVILLE DAIRY PRODUCTS COMPANY, Titusville, Pa.

Please tell me more about Navy Brand Concentrated Buttermilk and its benefits.

Name _____

Address _____

Farm Facts and Fancies

By ALVA AGEE

More Land

A THOUSAND dollars would seem to me a very large sum of money if the prices of all materials and services were ninety-nine per cent lower than they are. That is to say, the prices of what we buy determine the actual value of our own capital and income, if those prices are to stay fixed. Business depression brings reduction in prices, but more markedly so in the wholesale market than in the retail.

The average consumer gets what he wants on a retail scale, no matter whether it is food, clothing, legal advice or burial. I told my doctor how low wheat had dropped in Chicago, but he failed to tell the girl in his office who makes out the bills. Retail prices lag badly when price decline is the order of the day.

Labor's Part in It

The matter that is puzzling me is how far it is in our interest to have a big drop in prices of what we consume. Labor's wages make up the greater part of the price we pay. It is all wrong to sell low and buy high, as the farmer usually must do, and yet I do not want to see things return to the conditions some of us remember when a dollar was the wage for a man working and boarding himself. Then was the time that a man in debt had no chance at all of getting out. It is the buying power of labor that has kept the wheels going and made a market for all kinds of products. I am not arguing this matter at all, but showing that I am puzzled.

Of course retail prices should be lower because the price of living should be lower when times are poor, but we have awakened to the fact that the buying power of labor is the chief dependence for food products and manufactured products. One thing is sure and that is that if the farmer must sell at a low price he should buy at the same sort of a price, or course that means dollar times, and a forlorn hope for the debtor, but it seems only fair.

I reckon the thing to hope for, and with considerable reason, is that industry soon will be recovering, and that means a better market, and especially for those of our readers whose products do not pass through too many hands in reaching the consumer.

What We Have

Our economists who do so much guessing about the time when business will be good and when it will be bad bank heavily on the amount of new construction of buildings. It means use of raw materials and it indicates the financial condition of the public and its faith in the future. We are told that too many buildings were put up when the country felt prosperous, and that we do not need more housing room right now. That appears to be true, but much of the construction a few years ago was not due so much to lack of necessary space. When people are making money they want finer things than they have been having, and new and better houses are built to meet that want.

Right now most people find that they can get along with what they have, not only in the way of houses but in some other things. It is a wise man who is sure he can get along very nicely with anything that is not fully worn out. This does not make as bad a situation for business as the figures indicate. All the time the stuff on hand is wearing out.

The best time to buy is after there is some certainty that one can pay for what he buys. That certainty may be just around the corner for some people, but in the meantime old stuff looks pretty good to a thrifty farmer. Tough as farming looks, it is a better bet for the producer when the consumer is making money.

"In the Picture"

Fashions change in language as in clothes. I remember when the word "challenge" caught the popular taste. If anything needed to be done for the improvement of the individual or the world, it was announced as a "challenge" to people who were willing to be doers. In recent years we find "in the picture" filling a long-felt want. When one is presenting a social or economic problem and is describing conditions, he brings forward this or that as something "in the picture" and therefore not to be ignored. This expression is worth mentioning to those who want to be up-to-date, and eventually I hope to be able to use it without self-consciousness.

Dialect

Among the rights of the "Thriller" that were urged on this page a few months ago no mention was made of the use of dialect. The man who has been hampered by the laws of grammar knows the joy of finding himself free to say what he has to say with precision and not have his thought perverted by use of some unreasonable grammatical rule. And so it is in the case of one's local dialect. It isn't something to be shunted aside as a thing to be ashamed of. There is an aptness in much of it and a direct quality in it, that so-called correct speech often lacks.

The one purpose of language is to convey thought, and to do it easily. Local expressions often have that gift in high degree. Of course every one should be capable of use of pure English because he may need to converse with people not sufficiently broadly educated to understand him otherwise, but four out of five of us use dialect, and its use is not the right solely of the organization we feel called on to defend now and then.

Farmer Escapes Bull

BENJAMIN S. SILVER, a prominent farmer and landowner of near Havre de Grace, Maryland, had a very narrow escape from serious injury when trapped recently in his barnyard by an enraged bull. As it was he received painful bruises and severe shock when the infuriated animal tossed him over the barnyard fence.

Mr. Silver, who is 70 years of age, was working around the barn when the bull charged him. Attempting to make his escape from the maddened animal through the barnyard, he had almost reached the fence and was ready when the bull caught him by the tail and tossed him over his head. Fortunately, Mr. Silver was thrown over the fence and out of reach of the bull, else he would probably have been killed or seriously injured. However, it was a narrow enough escape, and it is the need for proper fencing of the barnyard that is being emphasized.



A Great Scientific Discovery ... Chickens Have Taste!

CHICKENS, pigs, calves—all animals and fowls have taste, the same as humans. This is probably the most far-reaching discovery of recent years. Because, with this scientific fact now firmly established, the whole process of animal and fowl feeding changes over night. It immediately links itself to the human problem because the process is the very same.

The purpose of the sense of taste, as we all know, is to stir up the digestive fluids and so activate the whole digestive tract. Good health waits upon digestion.

We have always known this in relation to humans. We have never thought of it in relation to fowls and animals.

Now we know that any chicken, any turkey, any duck, any pig, any calf will respond just as quickly and definitely to a tasty feeding as any human will to a tasty meal.

The Consolidated Products Company, experimenting over a number of years, finally hit upon Semi-Solid Buttermilk as the product that makes the greatest taste appeal to fowls and animals. And the results are so startling as to be almost incredible.

Without making any announcements as to what we were doing or why we were doing it, we began offering Semi-Solid Buttermilk to the farmers and feeders of America, and within a comparatively few years our volume had grown to where it now requires A HUNDRED MILLION POUNDS A YEAR to satisfy the present demand. In our original experimental work we had shipped a little Semi-Solid Buttermilk to foreign countries and now these foreign countries have become some of our biggest markets.

So it is that experience often runs before the facts.

But it is only now, at the end of this considerable number of experimental years, that we are ready to state the facts scientifically.

And the facts are that taste, to a degree almost as high as in human beings, is now definitely established amongst fowls and animals, that digestive fluids responding to taste will produce startling results in the feeding of fowls and animals, and that, finally, Semi-Solid Buttermilk seems to be the product that has the highest taste-appeal in the animal world.

The money value of this discovery to the farmers and feeders of America is beyond estimate. For not only is the speed of growth and productivity rapidly increased, but even the type of growth is better and more marketable.

And the cost of adding Semi-Solid Buttermilk is actually trivial compared to the amazing results that it produces.

The Consolidated Products Company, by repeated tests, have found that by making Semi-Solid Buttermilk part of your hog ration you can market your hogs six to nine days earlier. And, of course, earlier marketing brings you the highest prices. It means dollars for high priced pork instead of pennies for low priced lard. And it means the producing of that pork at a lower cost per hundredweight.

Even more startling are the results obtained by the poultryman. It takes only a few weeks for Semi-Solid Buttermilk to produce a marked increase in his number of eggs. And young chickens not only reach market size and weight quicker, but are far more in demand and command highest prices because milk-fed.

Increasing the sale of meat from your live stock

Livestock producers and packers are members of the same industry. Many of their problems are the same. Both are concerned with livestock and meat prices.

Livestock prices do not determine meat prices. Meat prices are simply what consumers will pay for the available supply of meat—which is perishable and must be sold promptly.

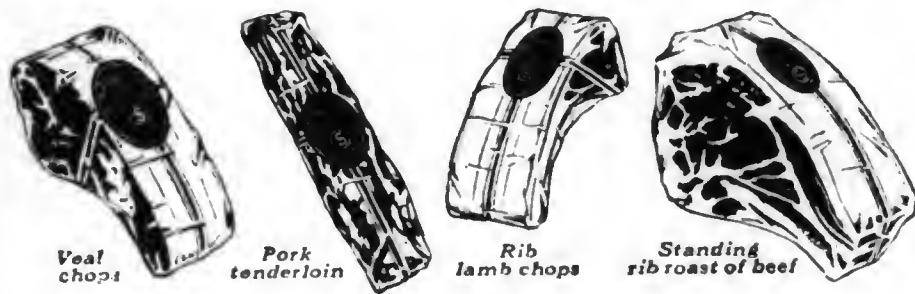
What the packer can get for meat and by-products deter-

mines what he can offer for livestock. Livestock is worth only what it will sell for in the form of meat and by-products.

Most producers realize this economic fact and that is the reason they have so cheerfully supported the advertising of meats through the industry's central organization—The National Live Stock and Meat Board.

If we want higher livestock prices, we must induce more people to eat more meat.

Swift's Premium Packaged Meats



Swift's Premium Quality identifiable, packaged meats give the consumer a new assurance of uniformity and quality in meat. Improvements of this sort tend to increase the eating of meat, and consequently to widen the market for live stock.

Swift & Company, U. S. A.

AT YOUR SERVICE is the attitude of every advertiser in this paper. Write them about your needs. Mention Pennsylvania Farmer.

Breeding by the Millions » Hatched in Filth Drenched with Dreadful, Sickening Bacteria

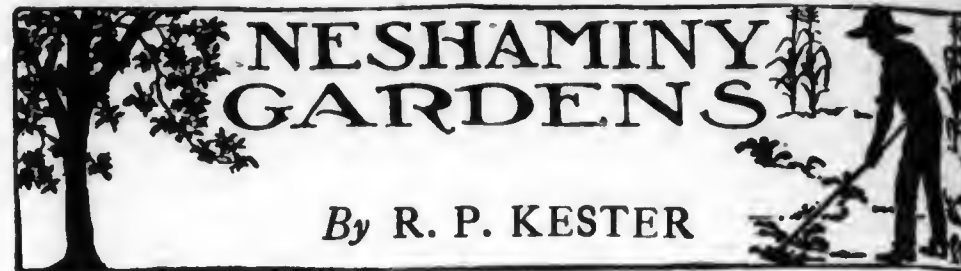


FLY-TOX
KILLS THEM ALL



Relief for Animals, too . . .

Spray STOCKAID high in barns and over livestock. Clears the air of flies, mosquitos, spider and other insects. Mist settles down on backs of livestock and kills biting, sucking, stinging pests. Keeps insects away for hours. STOCKAID is stainless. Will not blister or irritate the skin. Keeps hair nice and glossy. Harmless to people and animals, but fatal to Flies, Mosquitoes, Fleas and Lice.



By R. P. KESTER

THE main topic of conversation and the chief news in the newspapers these days is the hot, dry weather. Usually the Allegheny mountains separate us from the arid spells which frequently occur in the Mid West. But this time the scorching dry spell has been so long and so extensive that it flowed over the barrier and settled down on the Garden of Eden also. However, the rainfall here has been more nearly normal for the entire season, and it is only during July and August that the drouth has been severe. But the excessive heat in this more humid climate is hard on man and beast.

In the older days men turned instinctively to ask the Higher Power for help in times of drouth and flood. Only once or twice during this, the most widely spread drouth this country has had, have I read where any person or community has prayed for rain. In these days people are turning to officials, politicians and "experts." Will it bring any better results?

No doubt this age will go down in history as being the most credulous one of all time concerning the power and usefulness of politicians and experts. The rank and file of the people instinctively turn to thoughts of legislation and the magical power of little tin gods in human form when they want help or are dissatisfied with conditions. Our extensive and expensive system of education has failed so far to disabuse the lay mind of its inherent belief in magic.

The official records show this season to have been the hottest and driest in the history of the Weather Bureau. Already damage to the tune of millions of dollars has been done and, what is worse, conditions favorable to disease have been created. This is especially true where the water supply is not protected from pollution from the old-fashioned toilet facilities.

I see by the papers that somebody is bewailing the fact that there are still 7,000,000 families in the United States without an automobile! Now if we could get reliable statistics showing how many people have never seen a movie we would be getting in good shape to do some real philanthropic work. Nobody knows how many American homes still have the old smoky, smelly lamps as the only means of lighting, or how many millions have no water supply on tap in the house, and consequently no bath rooms; neither do we know how many still have those disreputable and dangerous little houses out in the garden where disease and filth await a chance to be washed into a superficial water supply.

If anything were needed to prove the statement that this nation is rapidly passing (or has passed) from an agricultural to an industrial land the 1930 census figures will complete the evidence. With the exception of Florida and California, no non-industrial state has made any substantial gain in population, and it is not for farming purposes that the increased numbers in these states have gone there. Only the resort states and the leading industrial states made any substantial growth.

The same thing is true of the counties of Pennsylvania. Some of the strictly farming counties have actually lost in numbers. My old home county, Clearfield, lost more than 14,000 in the ten years between 1920 and 1930. Bucks, my present home, has gained about that many, not be-

cause it is primarily an agricultural county, but because of the overflow from the cities nearby. The census clearly proves that the tendency to move out of the big cities into suburban territory is great and increasing. Modern means of transportation have made this possible.

I cut these notes short this week because I am just starting to see a double-header between the Athletics and the Chicago Cubs this afternoon. May the better team win!

Friendly Talks

By Edgar L. Vincent

A WAY down across the fields half a mile from my boyhood home in the days before the Civil War, in an old log house, lived a man we knew as Henry North. This old black man was a refugee from southern slavery. I do not think he had many friends, but he surely had one, and that was my father; and when the boom of the world's greatest civil war echoed from the battlefields of the South, Father one night, just when nobody but him ever knew, took this coal-black old man, and by the underground railway route carried him far to the northward somewhere, so that slavery might never lay its hands on him again.

And that did not include all my father's work for the men and women of the black race. The day came when he said goodbye to home, wife, mother and five little ones and marched away to lay down his life so that the land might be freed from the blight of slavery, and today all that is left of his life lies in an unknown grave in the South.

That, it seems to me, is the true test of a man's love for his fellow. He was willing to give all, the very best there was in him, that others might be free and happy. Are there any men and women in our day who are in some such way putting the very best there is in them into everything they do? I think so. I know farmers who have really worked themselves to death so that the world might be a little bit happier for it. Every furrow they have turned, every hill of corn they have hoed, every rod of fence they have built has been done with the finest fidelity to a great purpose.

It is worth while for us all as farmers and as men to ask ourselves the question, "What is my great purpose in life? Is it to lift the world to a little higher level? Is it to bless and to help humanity to live better, to love more and to occupy a better position in all respects?" If we can say "Yes" to that, the day will come when we shall hear the words, "Inasmuch as ye have done it unto one of these my brethren, ye have done it unto me."

Rye for Pasture

IN rye is the farmer's last refuge in his fight against nature to provide forage for livestock this fall and next spring, in the opinion of R. D. Lewis, extension specialist in farm crops for the Ohio State University.

Rye sown in August and early September will mature sufficiently to provide pasture this fall, and if cut lightly and evenly pastured should provide pasture again next spring, Lewis believes. There are few crops which may be planted now and utilized yet this year for forage.

More Readers on Farms in Pennsylvania than Any Other Farm Paper

PENNSYLVANIA FARMER
Published Weekly
Established 1877

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of Mar. 3, 1879.
PUBLISHED EVERY SATURDAY BY

CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., August 23, 1930

No. 8

Pennsylvanians In the Great Northwest

By C. L. WHITE

THE most difficult thing about the Pennsylvania Farmer Pacific-Northwest Tour is writing about it. For, to most of the 242 of us who returned home on August 10th, the trip was more than just a matter of going places and seeing things. It was a memorable experience. Though we traveled together most of the time, each of us saw things differently and experienced different reactions. It would require 242 volumes to tell the whole story.

Even a library full of tour reminiscences wouldn't solve the whole problem, for, as one man said, "The folks at home wouldn't believe it even if I had the words to tell them of all the wonderful things we have seen. All I can do is insist that they save up their pennies and come to see for themselves." If a man's own sons won't believe the truth, what chance has an editor?

If any one wants more than a few facts and a few personal impressions he can get it by hunting up those who made the trip and giving them an opportunity to talk. The skeptic may rest assured that the 242 versions of the tour story are all true, even if they do contain some rather wild yarns about bears and Indians and airplane adventures.

The Pacific-Northwest Tour was an all-expense, personally conducted vacation expedition sponsored by the Pennsylvania Farmer for farmers and their friends. The party was assembled wholly by publicity in the Pennsylvania Farmer and by correspondence. There was no personal solicitation.



The Pennsylvania Farmer Special rolling across northern Montana.

Naturally the editors are very grateful for this vote of reader confidence which was backed by checks totaling about \$75,000, all paid in advance and spent in behalf of the tour members.

The itinerary took us to the Pacific Coast through the northern states and southern provinces of Canada, returning through the central states. We traveled in an all-Pullman chartered train without change of cars during the whole trip. There were numerous side trips by automobile, bus and boat. The tour lasted 16 days, covered over 7,500 miles (from Philadelphia) and cost each adult member slightly over \$300.

On the starting date, July 26th, the tour party grew steadily all day, like a river fed by many

streams. The two main branches started at Philadelphia and Pittsburgh, uniting to form the tour special at Niagara Falls. They picked up tour members at various points enroute, including special Pullmans awaiting at Harrisburg and Williamsport.

The complete train consisted of nine sleeping cars, three dining cars, a club car, an observation car and, much of the way, two locomotives. All told, it was a fourteen car private train nearly a quarter of a mile long. It was all ours, from the comfortable club car up near the oil-burning, coal or electric engines to the roomy observation car on the rear end,—both scenes of countless games and talk-fests.

Every one knew his car and section number before he left home, so it didn't take us long to get settled in the Pullmans we were to occupy across the continent and back. Families and groups of friends found themselves together in the cars. Those who came alone made fast friends within a surprisingly short time. It was a friendly crowd.

Forty-two Pennsylvania counties were represented on the train. Six New Jersey counties had tour members, and Maryland, New York, West Virginia, Delaware and Virginia were well represented. The party ranged in age from nine to eighty-seven years.

Judging by a survey made in a few cars, more than two-thirds of the party were having their first Pullman experience (Continued on page 18.)



Members of the Pennsylvania Farmer Tour with Chief John Two Guns and his Braves at Big-Tree Lodge, Glacier National Park, Montana.

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published Every Saturday by
CAPPER-HARMAN-SLOCUM, INC.
7301 Penn Ave., Pittsburgh, Pa.

President: Arthur Capper
Vice President: T. D. Hermis, Geo. M. Slocum
Manager: Neff Laine

Editorial Staff
Editor-in-Chief: E. S. Bayard
Editor: C. L. White, M. C. Gilpin
Field Editors: Miss Horst, G. W. Harris

EDITORIAL OFFICES
Pittsburgh Harrisburg Philadelphia

CONTRIBUTING EDITORS
R. P. Keeter J. G. Lippman
Alva Agee H. C. Kandel
L. W. Lighty H. L. Scharring-Hausen
R. U. Blasingame A. A. Norland
J. F. Suley W. W. Fletcher
J. W. D. Zion Mrs. Gertrude Stewart
F. L. Bentley Gilbert S. Watts

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR.
Canadian subscriptions Fifty Cents per year extra for postage.
Rates of Advertising
\$1.00 per square line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for livestock and classified advertising. No deceptive, immoral or swindling advertisement inserted at any price.
Member Agricultural Publishers' Association.
Audit Bureau of Circulations.

Volume 103, No. 8 Established 1877

AGAINST BILLBOARDS

THE Grange proposes to lend the weight of its influence to the crusade against billboards which mar the beauties of nature or detract from the appearance of filling stations and roadside stands. Like the weather more has been said than done about this matter. What can be done will be accomplished through arousing public sentiment in favor of a more attractive country. And a fertile field for this is in the country, where most Grangers are located and most scenery found.

PROGRESSIVE FARMERS

NO one knows all about farming, but the more one learns about it the more he wants to know. A measure of progress is interest in information. Prof. H. J. Baker, extension service director in New Jersey, says that farmers in increasing numbers are seeking assistance from the State College of Agriculture and the Experiment Station. These institutions are for service. That they are being used to a growing degree indicates a growing efficiency on the part of New Jersey farmers.

LOTS OF CUSTOMERS

THIS nation contains 16 per cent more people than it did ten years ago. According to the latest census our population is now 122,899,190 head, and perhaps a few more have come to light since the figures were taken. All these folks will eat three times a day for many years. They are big eaters and they have the price, making the best market for farm products ever seen on earth. With this market at our door the agriculture of this country has pretty firm ground on which to stand no matter what anybody says about it.

HIGH-POWER FARMING

FORTY and a half million dollars worth of tractors and other farm machinery has been ordered in this country for Russia. It will be used in next spring's planting on collective and state farms. Collective or cooperative farms are now said to represent about 40 per cent of the total area sown in that country, while the state farms are described as "virtually agricultural factories, being operated almost entirely by machinery." and "have an area of about 7,500,000 acres this year." The program calls for an increase of over 100 per cent in 1930-31. More statistics

than materials have emanated from Russia in recent years, leading to the general opinion that the country was overrun with wild dreams. But forty million dollars worth of farm machinery is no idle dream. The results of its use and the outcome of the cooperative and factory farms will be of interest to agriculture in our land.

STANDARD OF LIVING

MUCH is said about our standard of living, something we understand in a general way to mean creature comforts and cultural advantages. The Bureau of Home Economics at Washington has been trying to measure this standard of living so that we can know when we have our share of it. They find this difficult, although they restrict their research to monetary requirements. They report that a lack of standardization of household goods and imperfect figures on home expenses prevent them making an accurate estimate. But do figures and dollar signs measure our standard of living? Some folks spend a lot of money and get little out of life, while others in extremely moderate circumstances are assets to the community and no burden to themselves. Of course a tile bathroom beats the old washtub and a handy kitchen is better than a woman-killing shanty, but we question whether these things make our standard of living. Rather we believe that a high standard of living creates them.

MIGHT LIVE 100 YEARS

WE believe in milk. It's a great food and a good drink. Noble men have started life on it and stately cows have rounded out an honorable term of years producing it. While we feel that the beneficial effects of this and other wholesome foods cannot be overrated we are sometimes alarmed at the extent of their possibilities. For instance, some one says: "If we, the public, were to drink enough milk, eat enough fruits, vegetables and bread, and feed our young cod-liver oil, we would be on our way to becoming a race of centenarians." Doubtless true. We might also be on our way to becoming animated creameries, vegetable reduction plants or land-locked fish. If we took in enough milk we might live a hundred years, or we might turn into a living Swiss cheese, full of holes and draped in fragile cheese cloth. If we ate enough fruit we might greet the rising sun a century hence, or we might turn into vinegar or apple-jack. If we consumed enough vegetables we might help elect twenty presidents, any one of whom would regard us as a cabbage head or a turnip top. And if we fed our young enough cod-liver oil we might be robbing the chickens, the whales or the sharks of the sea as well as starving the pill makers.

THE BIG DROUTH

NINETEEN THIRTY will probably go down in history as the year of the big drouth, a time to test the courage and try the souls of farm men and women. That the courage will not be found wanting or hearts prove faint is plain from the present reaction to the distressing condition. It takes strength of will to see crops dry up and livestock driven from the farm by lack of feed or water. Yet no one is sitting down and lamenting his misfortunes; all are racking their brains and alert to every opportunity to make the best of a bad plight and provide the groundwork for what we expect to be a better year. There are elements of hope and promise in the situation. Crops are surprising growers by their ability to stand dry weather; a reduction in the nation's food supply should mean better prices, and possibly a little scare about a shortage will have a salutary effect on consumers; the rigid culling of flocks and herds will leave only the most efficient producers,

and then there is the rule that a good year generally follows a poor one. But the most hopeful thing of all is the determination to "carry on" and meet any new emergency as worse ones in the past have been met.

THE CORN CROP

NEWSPAPER stories of a ruined corn crop are not borne out by the official report, which was issued last week. The August 1st estimate is for a crop of 2,212,000,000 bushels. This would be the smallest crop since 1901 and is a half billion bushels under the July estimate, but it is far from a total loss. In fact it will be enough to go around, pieced out with other grains. Fear of wholesale slaughter or starvation of livestock due to a lost corn crop is not justified, for all our farm animals will not starve when there is two billion bushels of corn in the country. The official estimate for all Pennsylvania crops is for a yield per acre only 61 per cent under the ten-year average. This is vastly different from the "utter ruin" accounts which have been prominent in headlines.

CRADLE OF AGRICULTURE

A DELEGATION of Iowa county agents who recently made a tour through eastern states was astonished at the fertile farms and evidences of a permanent and progressive agriculture in the southeastern part of this state. They had been laboring under the impression that Pennsylvania was all cities, mines and politicians. A western congressman who visited this section was so impressed that on his return home he announced that he had discovered the "cradle of real American agriculture." The methods of Pennsylvania German farmers who have maintained the fertility of the soil for two centuries were a revelation to him. While in Canada recently certain favored farming areas were pointed out to us as the best in the world "with the exception of Lancaster county." Thus our reputation spreads. It may be based on fertility of soil, friendliness of climate or proximity of markets, but eventually it must rest on the people who love the soil and the freedom of farm life. For generations they have upheld the high calling of agriculture in a way that has brought profit to themselves and credit to their state.

AID FOR DRY SECTIONS

THE foundation of a drouth-relief organization was laid at Washington last week. At President Hoover's call governors or their representatives, from thirteen states met to consider results of and remedies for eight dry months. The methods agreed on consist of (1) placing loans privately or where necessary with the assistance of state or national agencies; (2) Red Cross assistance; (3) employment, and (4) reduction of railway rates for food, feed and livestock. A national committee will be formed to supervise the work. Each governor, if he deems it necessary, will set up a state drouth-relief committee, which in turn will form county groups. The latter are to receive individual applications for relief and recommend the method of treatment. Railroads have already cut rates in half on feed and livestock where needed. Of the 319 counties listed by Secretary Hyde last week as needing reduced freight rates only four are in Pennsylvania, eight in Maryland, 44 in West Virginia and none in New Jersey. This gives a fair idea of the extent of dry-weather damage in this territory. It is serious in places but not generally acute. With rains last week and the demonstrated ability of crops to stand punishment it is not likely that much relief will be requested in this state.

New Jersey Farm Comment

By G. W. HARRIS

Of course I don't associate with Mrs. Cackle. She only says a 14-ounce egg." Such conversations might be overheard at the 1930-1931 New Jersey egg laying contests if society gossip were in vogue among the poultry aristocracy entered in these contests for the coming year.

"An egg is not just an egg," according to John W. Goodman's way of thinking and birds producing eggs weighing only 20 ounces to the dozen should not be rated as high as those laying eggs which weigh 26 ounces to the dozen. Accordingly, Mr. Goodman, who is superintendent of the contests in New Jersey, has introduced a point system of scoring birds which will give recognition to superior egg weight. Beginning on October 1 with the opening of the 1930-1931 contests, an egg weighing two ounces, or averaging 24 ounces to the dozen, will be worth one point to the pullet laying it. The bird that produces eggs averaging 26 ounces to the dozen will receive 1.10 points for each one laid—in other words, they receive a bonus of .10 point. The two-ounce egg is accepted as the weight logically deserving credit of one point. Deviations from that weight will be recorded on a basis of .05 of a point more, or less, for each ounce variation from the 24-ounce standard.

This new scoring system recognizes quality as well as quantity production and will give a more accurate measure of the real value of the pullet or cock both from the market egg and breeding standpoints.

SUSSEX county dairymen, intent on learning better dairy practices, secured their county last Friday under the leadership of County Agent Morrow and visited many of the leading dairy farms. A steady rain welcomed the long period of drouth did not lower the interest or spirits of the group, even though it did materially reduce the attendance.

Leaving the Court House at Newton at 9:00 a. m. the dairymen drove directly to the farm of Corsan Roy where some pasture improvement experiments have been conducted during the past two years. These fertilizer experimental plots are similar to many others being carried on in New Jersey and other eastern states through the joint efforts of fertilizer companies and extension workers in an effort to learn the best pasture management practices. Through proper fertilization they are learning that not only can the amount of growth of pasture grasses be increased, but a more desirable type of grass soon becomes established. The desirability of early pasture feed was emphasized. It was pointed out that although fertilization may increase the pasture yield, when compared to barn feeding and care at the time when cows cannot be turned out on poor pasture during early spring, total feed costs are materially reduced.

At Little Flower Monastery one of Sussex county's leading herds was inspected. This herd of 58 cows produced an average of 8,894.8 pounds of milk and 334 pounds of butterfat during 1929. Canned milk is produced at the Little Flower Monastery and the barn, cooling and bottling equipment are of the type to handle this production in an economical manner without excessive costs. S. R. Montross, at whose farm we stopped just before luncheon, proudly exhibited eight daughters of his four-year-old herd sire. At an average age of 23 months these daughters produced during the last five months an average of 3,598.5 pounds of milk and 135 pounds of butterfat. The average test during this period was 3.76 per cent. Mr. Montross attributes a large part of this production to a good sire. This sire is now proving his ability to transmit high production to his daughters—as a result Mr. Montross plans to keep him in his herd.

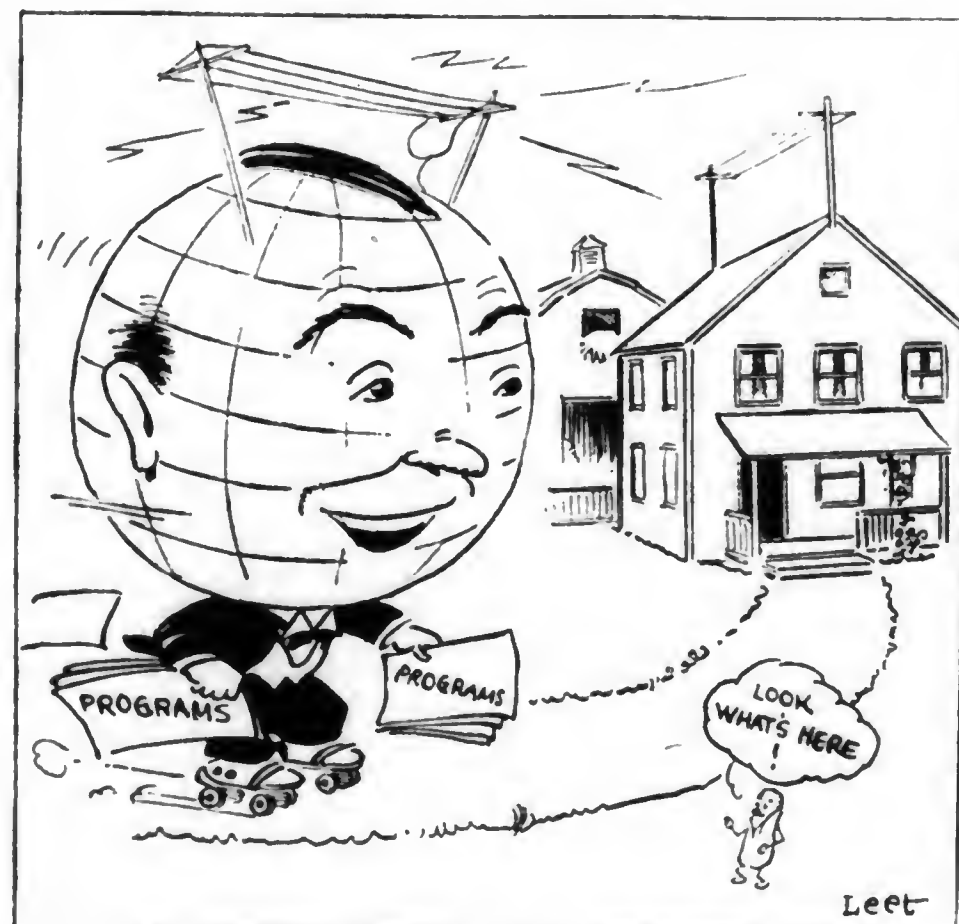
Immediately following the basket luncheon Frank Knowles, specialist in economics at the College, reviewed the entire management and operation of Mr. Montross's dairy farm. R. Connelly, in speaking to the group said that Sussex county, the leading dairy county in New Jersey, also leads in the number of proved sires. Dr. E. L. Wilson, representing one of the north Jersey retail milk companies, told of some of the difficulties which present themselves in dealing with producers and consumers of milk.

In spite of an expenditure of \$1,129,000 during the past 12 years in New Jersey in an effort to check the spread of the Japanese beetle, that

voracious pest has continued to march onward at the rate of 25 miles each year. With the introduction of every new pest in recent years immediately a quarantine has been established which in most cases has resulted in heavy expenditure of state and federal funds, but seldom has it checked the spread of the pest.

A recent study of the economic costs of quarantines in New Jersey made by the Department of Agriculture adds further proof to the belief of many farmers in the state that the Japanese beetle quarantine has been costly without producing proposed results.

Secretary of Agriculture William B. Duryee stated, "Since quarantine measures have not proved successful in holding back the beetle, which spreads an average of about 25 miles each year, it is a question whether the quarantine has been entirely worth the amount spent. If possible, the value of the quarantine in preventing economic



The world rolls to your door via radio.

loss should be balanced against its cost to the public and individuals."

While the increased costs to producers and shippers of farm products due to quarantine regulations have been negligible, nursery and greenhouse concerns have been put to heavy expense. The survey shows that more than \$125,000 was spent by 27 nursery companies in New Jersey during one year because of added expenses caused by quarantines.

With regard to costs to these nursery companies the report gives the following statement:

"It is definitely known that these quarantines are taking approximately one-fifth of the total net income of certain large nursery and greenhouse concerns in the state; that while this charge apparently has not resulted in forcing such concerns out of business, it is without question an onerous burden. If we may use the reported loss of business as an index, it is evident that the quarantines have placed these concerns at a disadvantage in competition with concerns outside of the regulated area. It may be argued that this is not really an economic loss, but rather a transfer of business from the group within the quarantined area to the group without. However, such a distinction holds little comfort for the first group. Some few of the concerns so affected have made up their losses through concentration of sales effort within the area. Clearly the possibilities of such action are limited, and remain open only so long as the number taking advantage of them remain small."

After a strenuous fight nurserymen and other interested individuals were successful last year in eliminating the Asiatic beetle quarantine barriers which they claimed were adding useless heavy expense to their cost of operation.

This survey report for the first time brings the

New Jersey Department of Agriculture into the open as opposing quarantines of questionable economic value which they are compelled to enforce. The Department neither proposes nor desires a discontinuation of quarantine regulations without a careful study being made as to their economic value, but they evidently feel, as do

many others, that often quarantines are established without consideration being given to the economic factor.

CLARENCE W. DROMGOLD, who for the past two years has been doing dairy inspection work for the Philadelphia Interstate Dairy Council, was recently appointed club agent for Hunterdon and Somerset counties. Boys and girls of Four-H clubs in these counties have been without a club leader for over a year, the county agents have been dividing their time between club activities and their regular work.

Mr. Dromgold will assume his new duties on September 1. He is a graduate of Pennsylvania State College in the class of 1928 and a former Four-H Club member. His past activities in club work, his experience on dairy and livestock judging teams and his present work should be invaluable to him in furthering Four-H Club work in Hunterdon and Somerset counties.

AT the recent Mt. Airy Calf Club Show in Hunterdon county, Kenneth Hamilton, Lambertville, won the silver cup awarded by Carl W. Akerman for the best showman, and John La Rowe, Rocktown, won the cup offered by William Lauderdale for the best fitted animal.

Percy Van Horn of Stockton showed the grand champion Guernsey bull; Charles Farlee the junior champion female, and Nathaniel Phillips the grand champion Guernsey cow. Alva Cronce, Jr., exhibited the junior champion Holstein female while James Lambert showed the senior and grand champion Holstein. John Coleman took grand championship award with his Holstein bull. Among the Jersey classes grand championships went to Kenneth Hamilton's prize bull and William Hamilton's champion female.

ENROLLMENT in the Maryland Ten Ton Tomato Club contest for 1930 is nearly double that of 1929, but it is feared that the long drouth may greatly cut the yield of the contestants this year. During 1929 a total of 127 growers signed up in the contest while this year there are 252 contestants.

Delaware Notes

SHIPMENTS of cucumbers and cantaloupes reached the highest point of the season here recently. At Seaford, Delaware, alone, there were, on Tuesday and Wednesday, twenty carloads of cantaloupes shipped to the northern markets. This does not include the number shipped by truck.

Cantaloupes have been bringing from \$1 to \$1.65 for flats and the large carriers are selling from \$2.50 to \$3.25 in the local markets. Cucumbers have been bringing from sixty cents to \$1.50 per hamper.

On several mornings the trucks and wagons loaded with cantaloupes have been lined up over half a mile waiting their turn to dispose of their products at the local market.

The general shipment of 'lopes from the entire peninsula has not been as great this year as last season, but the price has remained much higher than any previous season, and by this the farmers have been able to realize a fair profit from their crop. Some of the cantaloupe growers who had a fairly good yield have reported sales from \$400 to \$500 per acre and were still cutting.

Part of Sussex county was visited by a nice shower of rain and it is expected to help the cantaloupe crop a great deal. A large number of farmers reorted that their picking would end this week but since the rain it is believed that the cantaloupes will last several more days.

THE corn crop in Delaware at this season of the year always in the past has looked very promising, but this summer the farmers are not expecting more than a fifty per cent yield. The ears have formed and are about one-half the normal size and some are not near filled out. If the dry weather continues as it has in the past they will not have more than a forty per cent yield.

Karl P. Thompson.

Stinking Smut of Wheat

By R. S. KIRBY

STINKING smut of wheat in 1930 is like a skunk which has just been caught in a steel trap; that is, largely, removed as a menace for the moment but still dangerous since it is possible for it to escape and again become a destroyer unless proper measures are followed to kill the pest.

Examinations of many wheat fields made throughout the state each year show that the loss from stinking smut this year is the smallest since 1924. The loss in 1930 was less than one-third of that from this pest during the epidemic years of 1926 and 1927, less than one-half of the loss occurring in 1928 and slightly under the loss occurring in 1929. Examinations made this year of 127 wheat fields located in 20 different counties in Pennsylvania showed an average loss of two per cent or approximately one-third of a bushel of wheat per acre.

Stinking smut was observed in wheat this spring soon after the wheat heads appeared. It was first found in a field located near Gettysburg, Adams county. As usual the smutted heads stood more erect than the healthy ones and were a blue green color, differentiating them from the yellow green of the healthy ones. In contrast to the wheat grains in the healthy heads, the kernels in the smutted heads were darker in color, and shorter and plumper in shape. Inside the coat of the smutted kernels was a dark, dirty-like mass of black powder which smelled like rotten fish. This black powder is the spores or seed of the fungus *Tilletia laevis* which is the cause of stinking smut in wheat. Each smutted kernel of wheat usually contains one to four million spores. These spores like the seed of corn, wheat or other higher plants enable the fungus to live from year to year and infest clean crops of wheat.

The spores of the smut fungus are scattered when the smutted kernels break open during harvesting, threshing or seeding. Many of them adhere to the surface of healthy wheat grains where they remain dormant until after they are planted with the wheat seed. When the ground is fairly damp and the soil temperature is between 40 and 68 degrees F., the fungus spores are able to send out a delicate root-like growth capable of entering the young wheat sprout. The fungus growth passes the winter within the wheat plant and the next spring it follows the growing shoot of the wheat plant up to the head where the fungus enters the young wheat kernels and replaces all parts of each kernel except the seed coat with the smut spores.

Any measure to control successfully stinking smut must remove all the smutted kernels or smut balls, kill all the spores adhering to the surface of the healthy wheat grains, and protect the seed wheat from again being contaminated. These measures can best be accomplished by the following seven steps in smut control.

1. Obtain seed wheat as free as possible from stinking smut.
2. Do not attempt to treat heavily smutted wheat for smut control. Where more than ten per cent of smut balls occur in uncleaned wheat it is impossible to control the smut completely.
3. Remove all smutted kernels or smut balls by thoroughly cleaning all seed wheat before treating.
4. Before planting seed wheat known to contain any stinking smut, treat with copper carbonate dust.



Smutted and healthy kernels of wheat. Top: Healthy kernels. Bottom: Smutted kernels or smut balls.

5. Treat each bushel of seed wheat with two and one-half ounces of copper carbonate dust.

6. Treat wheat only in treating machines that do a thorough job of coating the copper carbonate dust over the wheat. The double-acting home-made treater and commercial wheat treating machines are the most efficient.

7. Plant wheat as soon as possible after danger from the Hessian fly has passed.

The high degree of efficiency of this treatment can best be shown by the results obtained by farmers who planted fields with wheat treated according to the seven steps in stinking smut control in 1927, 1928 and 1929. Visits were made to 119 of these fields and less than a total of 25 smutted heads were found while in 267 untreated fields examined in the same localities there was an average of 3.2 per cent stinking smut.

Proper treating machinery must be used in treating as shown by one Northampton county farmer who last fall treated his wheat by rolling it in a barrel without paddles. This resulted in incomplete covering of the seed wheat with the copper carbonate dust and this summer his wheat field had two per cent of stinking smut.

Experiments conducted at the Pennsylvania State College show that all the smut balls must



Portable commercial wheat treating outfit of Wolgenuth Bros., Florin, Lancaster county.

A Peruvian Market Place

By E. S. BAYARD

IN Lima I went up to the offices of the Cerro de Pasco Copper Mining Company to see about getting a collection of Peruvian copper ores for the museum of the School of Mineral Industries at Pennsylvania State College. The manager, Mr. Harold Kingsmill, kindly heard my request and immediately granted it, saying that he thought he knew what was wanted, as his geologists had prepared a similar collection for Harvard University. From Mr. Kingsmill's office I walked on and seeing a crowd a block or two away thought I would ascertain what was doing. Thus I ran into the market house and the market, in full swing, with thousands of sellers and buyers in and around it.

The sellers were mainly of the Indian and Chinese races, though merchants of many races are in business in the stores which surround the big open place in which the market is held. This open space, all under roof is divided into sections for different commodities: one for fruits and flowers, one for meats, one for

fish, one for vegetables, etc. The cries of the vendors and the arguments of the buyers make a constant noise which can hardly be called a roar—for it is a mixture of sounds and the chatter of the near-by traders is always audible above the big noise.

It would be impossible to enumerate all of the things sold on this market, but practically all the edible products of the country are here. Corn and corn meal are staples, the colors of the maize yellow, red and black. The ears of sweet corn are white, long and pointed, those of field corn rather short and round at the tip. Beans of several kinds and colors were on sale, but I saw only one lot of the kind we call Lima—and this was in Lima itself. Two varieties of beans were sprouted, the sprouts two inches long or more, but I do not know how these are used in cooking.

Sugar was offered in various forms, some in small cakes, some in packages made of palm leaves, some in long containers made of plaited bark or fiber. Cheeses of many kinds were visible, most of them evidently the product of the dairy and not of the factory. Many of the small cheeses were wrapped in green palm leaf or corn husk and one woman made a specialty of selling such wrappers. Potatoes were among the staples and they were not closely sorted or sized as in the French and other markets I have seen.

Among the eggs were some green ones, about the same size as a hen's egg but a little different in shape. I found that (continued on page 18)



Stinking smut of wheat. Left: Healthy head. Right: Two smutted heads.

be removed by thorough cleaning before treating, since treated seed containing one to ten per cent of smut balls will have approximately an equal percentage of smut in the succeeding crop.

Millers and warehouse men know the importance of smut control and 70 of them have already installed commercial machines to clean and treat the wheat for farmers in their locality. Three of these machines, owned by a Lancaster county grain dealer, a thresherman and seedsman, are mounted on trucks and go direct to the farms where they clean and treat wheat for the grower.

In 1930 stinking smut was found in 23 per cent of the wheat fields examined. The heaviest infection occurred in the southeastern part of the state where 34 per cent of the untreated fields were infested with stinking smut and one wheat field in Northampton county had 67 per cent of smutted heads. In other sections of the state there was only four per cent of the fields infested with stinking smut and one field in Butler county had 25 per cent infected heads.

The safe rule for all wheat growers this year is to treat their seed wheat if it is known to contain any stinking smut and thus eliminate the chance that the stinking smut pest may again get loose and cause tremendous losses as it did in 1926 and 1927.

(*) For detailed directions on how to make a home-made treating machine, how to treat and seed the treated grain, see Pennsylvania College Extension Circular No. 117. This bulletin may be obtained from county agricultural agents or writing to the author of this article.

AND that's all the thanks a man gets," grumbled Doody, "for takin' the outside end! Because you can't spend much up this way for bannock and bacon, you think a chap can live the same way in the city. The next time some of you fellows can take the old canvas valise and pike to New York and see how you come out on expenses. I've had it loaded onto me right along. I haven't asked to go. But I tell you now, it's the last time you load me down with dope and phenacetin and jinglers and start me away on the long end."

The men moved uneasily. "We're all-in business together," said Donald, dropping his gruffness and beginning to whine. "We can't go outside and handle the trade like you can, Lud. But we don't want you to get reckless. That's all, ain't it, boys?" There was a grumble of affirmation. "We want expenses kept down, that's all. Seems as if—mind you, now, Lud, it only seems as if—the bills for car fare and hotels and all such was a mite too steep this trip. And then, again, you're dumpin' in strangers on us." He nodded sourly in the direction of Shain.

Doody moved away into the gloom, snorting with disgust. Two of the men hastened after him and urged him back. Donald continued his apologies, for it was now apparent that their agent was deeply incensed. But after another long colloquy they shook hands all round, and moved away into the house, for a slatternly woman had twice clanged a cracked bell at them from a window.

But dissatisfaction was still written large on the faces of them all, and one of the men remarked to a mate at his elbow:

"There's no use talkin'. Doody ain't what he used to be. He's gettin' slack, and he's blowin' in our good money too careless, and he's picked up a galoot that none of us knows and that ain't been tried out—and if a whole lot of trouble don't come of it, then robins is all done hollerin' for rain. Lud Doody ain't been the same man since Wall Co-wallis died and left him without a mate that he knew the motions of."

They were still so intent on their own tangled affairs that they took no note of Shain still sitting on the bank, shivering in his wet garments, and wondering if it was safe to intrude his presence on this strange group of jokers. He decided with increasing anger that he would stay where he was until some one came to him with due apology.

In a few moments his thoughts were taken off himself by the approach of someone through the quick water below. The person, dimly seen in the dusk, was standing in a deeply laden canoe and was poling. Shain heard the clink of his iron-shod pole on the stones. The man was evidently in a desperate hurry, for the pole, half-set at many of his pushes, splashed and slipped, and the canoe rocked precariously. And there was another sound besides the clanking of the iron and the splashing. The man was weeping aloud.

WHEN he came near the bank he evidently saw the silent figure there, for he gasped:

"Vital!" and a sob clucked in his throat. Shain did not reply.

"Mose!"

"I guess I'm a stranger!" stammered Shain. The man set his pole, held his canoe against the bank and endeavored to calm himself.

"If you want to speak to any one here, I'll go after him," volunteered Shain; but at that moment Donald came up.

"Come in and get supper, son, and dry yourself," he said, not unkindly. "We're a bit rough in our jokes up this way sometimes, but we're good fellows when you get to know us."

"Donald!" whimpered the man in the boat, unseen till now by the other, who had just come from the lighted room. "I've killed him, Donald. I've killed him, and I didn't go for to do it, either!" wailed the man.

"Is it you, Clair?" Donald whispered.

"Yes, and I've killed him, I've—"

"Shut up!" cried Donald.

"But I've—"

Donald leaped down the bank, and at the same time the man stumbled out of the canoe and came thrashing through the water to meet him, beginning his wail once more. But the tall man seized him by neck and shoulder, and shook him until his voice wavered in his throat.

"Get into the house, boy, get into the house!" Donald screeched. "Get into the house and tell Lud and the rest to come here! Put your hands over your ears and run, I tell you! It isn't healthy to hear some things up this way!" he went on in the same high tones.

As Shain, with his heart in his throat, started away, he heard Donald dragging the man through the water toward the shore, and growling, "Shut your mouth, you drunken fool!"

When the others, obeying the summons that he gasped, rushed out of the room, Shain sat limply at the table they had left and tried to eat, the slatternly woman looking at him curiously, at the same time that she cocked her ear at the open window.

The Skokums of the Allegash

By Holman F. Day

Copyright, 1907, by Perry Mason Company, Boston, Mass.

SYNOPSIS

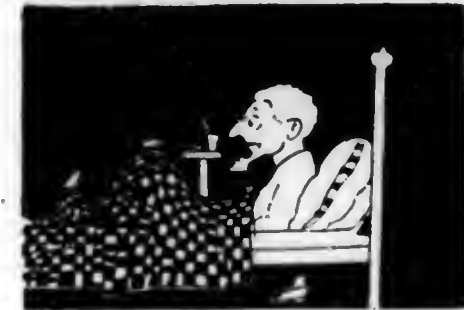
The Mayor of Toban Jaws is the title, given in fun by the rough drivers who direct the stream of logs down the river, to the "runt" of the gang who is left alone all season to watch a ledge and prevent logs piling up there and causing a jam. This job falls to young Shain Searway on his first trip with the river men. At first very lonesome he learns to like the river and enjoys occasional visitors who use it as a thoroughfare. One of these is Lud Doody, a man who shows a rod to find treasure with and induces Shain to accompany him in search of a fortune. Leaving Doody's former partner, much against his will, to guard the Jawa and prevent a log jam young Searway prepares for his great adventure. After some traveling by canoe they stop at a settlement where they are met by several suspicious-looking characters who seem to know Doody.

Both of them heard one more cry, "Boys, I've killed him!" ending in a gurgle, as if strong hands had pressed back the words.

When a long hour had passed without a sound from outside and without the men returning, Shain rolled into the bunk that the woman pointed out to him in the low garret, and fell asleep, for the bunk was the nearest like a bed of anything he had seen for many weeks, and he was weary and lonely.

At sunrise he heard Doody stirring in the opposite bunk, saw him roll out and pull on the few garments that he had removed overnight, and heard him go creaking away down the ladder.

The Cheerful Plowman



IT'S DIFFERENT NOW; I'VE BEEN DELIRIOUS!

I USED to think it silly when some one said, "Oh my, I tell you, Mike and Milly, I'm sick enough to die. I feel like seven measles and twenty-seven mumps, like forty wounded weasels, I'm surely in the dumps. So, hook up Blush and Roger to our decrepit sleigh and take this willing edger to Doctor Squiff today. The hospital, I reckon, is just the place for me, I hear the devils beckon. I see the angels flee. Hurrah for Bill McKinley, and Bonaparte, and Luke. Good morning Mike McKinley! Here comes the reigning duke. . . ."

Then such a mess of ravings, a mind all on the blink, a brain all gone to shavings, delirious, I think. Yes, I would say, "How silly for any man of strength to speak of Mike and Milly, and twitter at such length. A man who's worth his fodder, a man who's worth his beans, will never rave and dither and lose his mental means. Delirious? The dickens! A man whose mind is right will not go bats like chickens and see things in the night."

But listen, I'm repenting of all I used to say, for I have just been scenting some devils here today. I'm on my back with quinsy, with muscle-kink, and flu, I'm sicker than Pete Linsey when he turned black and blue. Hospital? I should reckon! That's where I am, by jing—right where the devils beckon, right where they laugh and sing.

I'm where the snakes run riot across my bed at night, where mice are never quiet, where spooks are common sight. Last night I talked to Caesar, to James K. Polk, and Lee, while Sophocles, the geezer, came here to visit me. My sakes! I sure was batty, as loony as a hen. My mind was simply catty, I twittered like a wren. Yes, I am doubly sorry for all the things I said, when neighbor Steve McQuarry was sick and raising Ned. J. E. T.

When he followed, he found his sponsor sluicing water over his face and his tousled hair, and dipping his big hands into a tin wash-basin propped on the door-step. He "whooshed" at his ablutions as cheerily as if the previous evening had been without incident, and ate breakfast with a calm zest that Shain tried to imitate.

The sun twinkled on the river and the birds sang, and there was no indication of the presence of the woe-stricken self-accuser or the others, who had been guests the day before. Shain peered at the other cabins from time to time, but when he noted that several canoes that had been overturned on the bank the afternoon before were now gone, he made up his mind that there had been an exodus. At a word from Doody he picked up his duffel-bag and followed to the canoe.

They did not swing out to the center of the river as usual. Doody skirted the shore, hugging closely under the high banks, and even crossing the stream from time to time, in order to take advantage of the shelter of a distant point that shut off the vista. Entire control of the canoe belonged to the stern-paddle, and Shain dipped straight away, his eyes on the front and silent. Doody had silenced him impatiently once or twice when he had spoken.

Before turning each river cape the elder man curtly ordered Shain to stop paddling. While the canoe floated on in the hush, Doody listened with head bent to the surface of the water.

Thus they passed the hours till mid-afternoon, and all the time apprehensiveness that became fear grew in the mind of the young man. He realized that something threatening, something untoward, was coming up the river. When the canoe lurked at the turn of a point, and they listened, he harkened with open mouth and suspended breath.

It was when the canoe was half-way between capes that the captain of the expedition suddenly hissed a warning, dove the paddle deep, and with a twist of the blade, halted progress. Other voyagers were approaching round the bend in the stream. There was the murmur of voices. Once in a while the muffled tunk of a paddle against a canoe gunwale revealed a careless paddler.

THE fear that had been growing within Shain all day made him a precipitate lieutenant. He was on shore the moment their canoe touched the pebbles, and at Doody's first word, lifted his end valiantly. Then, running, he "made his bigness" like a battering-ram through a thick alder growth, careless of the scratchy twigs, and fairly dragged Doody and the canoe after him into the covert.

With woodsman's caution the elder man straightened a few of the broken and bent alders, and both lay flat and waited.

Three canoes came round the bend. There were three men in each canoe, two paddling and the third comfortably disposed amidstships. The men were talking. One of the canoes suddenly turned across the stream and poked into a little lagoon that opened off the river. The others loafed along, and passed the alders with lazy dip of the paddles.

"I don't believe it's any use to hunt gullies and logans," said one of the men. "He kept straight on, that's what he did. He won't stop this side of Caucomgomoc."

"Nothing here!" hailed one of the men in the scout canoe, as it emerged from the lagoon and came briskly across the river. Then all the paddlers bent to their work, and in five minutes they had swept round the upper bend.

Doody did not offer to move for a time. He crouched in the alders and filled his pipe from a leather pouch.

"If you should take a pin, son," he said, at last, "and toss it into that dry-kye there, how long do you think it would take you to find it if you kept your eyes shut?"

"I reckon I'd never find it in such a place as that is, even with my eyes open," said the young man.

"And those chaps will never get the man they're after so long as they keep their mouths open! Why, they might as well come up this river with a life and drum corps! They couldn't catch suckers when they're runnin'!"

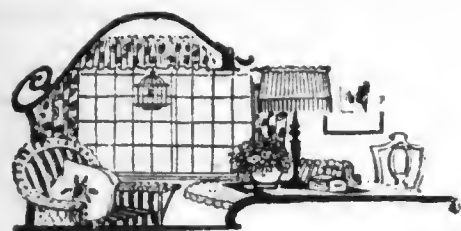
Growing his scorn, he motioned to Shain, and they deposited the canoe in the river once more. They floated for a little while, to allow Doody time to light his pipe; and they could still hear the rumble of voices far up the river, the sound carrying on the water.

"Do you have any idea of what especial breed of cats that was?" queried Doody.

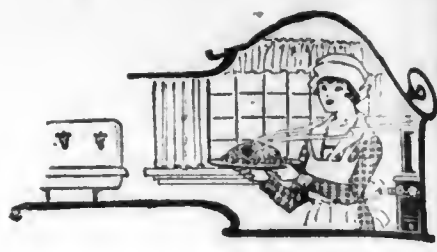
"Sportsmen, I suppose," said Shain.

"Oh, no! Sportsmen don't want to work hard enough to peddle up the Allegash this time of year," replied Doody. "Those summer chaps go the smooth way, like butterflies move with the slant of the wind. No, son, the men that went up just us just now are more of the nature of that kind of a critter." He pointed his paddle to a hawk that was sturdily beating his wings in straight flight over the treetops. "Now I suppose you've seen more or less United States deputy marshals?" Shain shook his head.

(To be continued.)



The Farm Home



Do Your Own Dry Cleaning

By BESSIE L. PUTNAM

EVERY woman who is economically inclined enjoys cleaning her silk and crepe dresses at home if she has a porch on which to do the work. There are preparations on the market which are less inflammable than gasoline. Still one should use all precaution and never, never work with them near a fire. In the country you have special advantages and can surely play safe and the cleaning is really mere play.

You may get a good cleaning compound at the service station for sixty cents a gallon. Two gallons will clean half a dozen or more silk or crepe dresses, to say nothing of scarfs, ribbons, and gloves—less than the cost of a single dress at a first-class dry cleaning establishment. It is really very easily done, once you know how.

The great secret is in having your dishes perfectly clean. If a pan or pail has been used for other purposes, give it a rub with a cloth moistened with the cleaning solution, even after you think it is clean. Porcelain, granite, or tinware will do the work in a satisfactory manner.

Remove all fancy buckles. If there are spots from ice cream or other sweets, go over them with a cloth dampened in clear warm water before commencing the real cleaning. You will find it hard to locate them after the goods have been wet with the cleaning compound. Set your pail of liquid in a pan of boiling water as it is more effective when heated. Put just enough of the cleaning material in the pail to thoroughly cover a dress and have a second dish of the solution for a fresh rinse after cleaning. Commence with the lightest colored piece you have. Do not rub as this may injure the texture. A soft brush may be used on collars or soiled places. The goods should never be wrung, either by hand or with the wringer. Squeeze as dry as possible. Then pass through a second bath in the same way, dipping up and down and squeezing. Shake out well and place on a hanger or pin at the shoulders and hang in the shade to dry.

Colors will not Run

Then proceed with the next piece of light color, leaving the darker colored things for the last. If a dress is dark with a light vest, do not worry, but treat it as if it were all of one color, and it will come out all right. Add to the solution as it is taken up by the material, just adding enough more to make the work easy. If it gets cold, renew the boiling water, but remember to take the hot water out to your work, never the work near a fire.

By the time your last dresses are ready to hang out the first will be dry and you can see if there are any extra touches needed. If so, put them through a bath of fresh cleaning solution. Shake out, and dry again. They will need no pressing, even though there are small pleats. Let them air until all odor is gone which will require only a short time.

Pour any solution that you may have left into a glass jar and cover tightly. Keep in some building where there is no fire. When the sediment settles pour off the upper part and you have material for doing more cleaning of colored goods.

Play Time Helps

SHOOTING baskets is an excellent pastime for children. Remove the bottom from a peach basket, one of those holding a half bushel, and put a stout wire around the top with a firm loop at one side. Drive hooks in the clothes pole or a fence post, some low for the younger tots and some at regulation height. Hang your basket on one of these, and use any large ball. Patience will develop skill that may be useful in later years when the "tot" makes the high school team.

In place of wooden beads, elbow macaroni may be strung on rainy days and if mother wishes to color it, drop in strong bluing, or in beet juice and spread on a board until thoroughly dry.

Scrambled pictures are the delight of every child, but it is difficult to buy one that is not too complicated. Take any colored picture of a horse, lion, house, flowers or children. Past on a heavy cardboard and cut in triangles, squares, octagons, rectangles, etc., with a sharp knife.



Keep your hats smart and new looking by carefully placing them on a form that can be adjusted to the size needed.

These forms can be had in various colors and a variety of materials—prices ranging from 50c to \$1.75. Write Home Department for information, sending the usual stamped envelope for reply.

Hot Weather Recipes

Spanish Cream

SPANISH cream is one of those desserts cool and light enough for a hot day, and yet satisfying because of the blend of eggs and milk. Almond is a flavoring most people like in Spanish cream served alone or with plain or whipped cream. Vanilla is preferable, if fruit sauce is added. Strawberries, raspberries, sliced peaches or apricots are all excellent accompaniments for Spanish cream. The recipe is from the Bureau of Home Economics of the U. S. Department of Agriculture.

One tablespoon gelatin, one-fourth cup cold water, one quart milk, one-half cup sugar, one-fourth teaspoon salt, four or five eggs, one-fourth teaspoon almond extract, or one teaspoon vanilla.

Soak the gelatin in the cold water for five minutes. Heat the milk in a double boiler, and add to it the sugar and the salt. Beat the egg yolks, gradually add the hot milk to them, mix well, pour back into the double boiler, and cook this mixture until it coats a spoon. Remove it from the fire, add the softened gelatin, stir well, and chill until partially set. Beat the custard, add the flavoring, fold in the well-beaten egg whites, pour into individual molds or a pudding dish wet with cold water, and set away to become firm. Serve with cream or with crushed fruit sauce.

Fruit Cup

Many combinations of fruit, fresh or canned, may be used for fruit cup. Use colors that blend or contrast pleasantly and combine acid fruits with sweet, and firm with juicy kinds. Cut large fruits into small attractive pieces, mix lightly so that they keep their shape, sweeten slightly, chill before serving, and garnish the individual servings with sprigs of mint or choice bright-colored fruits.

Good combinations are: Strawberries, oranges and apples. Purple grapes with seeds removed, grapefruit and apricots. Peaches, raspberries and pineapples. Watermelon, honeydew or muskmelon and oranges. Red cherries, pears and green grapes.

EGGS HAVE FOOD VALUES

FOR health, an egg a day for each member of the family over two years of age and an egg yolk for the baby is recommended by the New York state college of home economics at Cornell University.

Eggs are one of the best sources of iron and protein as well as of the vitamins A and D, and they contain phosphorus and lime or calcium. The white of the egg is rich in protein while the yolk contains the greater part of the minerals and vitamins. Since the baby receives protein from his milk, the yolk is the only part of the egg which he needs; older children and adults will benefit from the whole egg.

Waterless Cooking

By HILDA RICHMOND

IF you cannot afford one of the good waterless cookers just now, a very good substitute for steaming may be obtained by putting the vegetables with a very little water in the oven and covering them tightly. For example spinach can be cooked in a glass or earthenware casserole by simply draining and shaking off part of the moisture. Cover and cook till tender in its own juice. Add butter and rings of hard cooked egg and serve right in the dish.

Even a tin coffee can with a little hole punched in the lid so it will not explode will steam new peas in the oven with a few tablespoons of water. They are delicious. Tomatoes can be oven cooked in a can or casserole or even a granite pan with a cover. The popular "five-and-ten" stores often have small pans with rather tight fitting covers well adapted to steaming. We like baked apples steamed for half the time, and then the cover removed to let the fruit brown.

A piece of ham cooked in the oven with a little water in a closely covered kettle is much nicer we think, than boiled on the stove. It takes longer, but the flavor seems much improved by the slow steaming. Any one who has eaten steamed smoked ham from the pressure cooker knows that it is delicious, and a kettle with a close cover makes a good substitute in the oven.

A friend who makes delicious fried, baked or roast chicken for socials, browns the pieces on top of the stove, packs them in a stone jar with a lid, bakes till tender and takes them piping hot to the supper or dinner. It certainly is "some eating" as the children say.

For Style and Saving

No. 6895.—Girls' dress. Cut in five sizes: 8, 10, 12, 14 and 16 years. A 12-year size requires 3½ yards of material 35 inches wide. For contrasting material ¾ yard is required 35 inches wide, cut crosswise. Price 15c or two for 25c.

No. 6704.—Girls' dress. Cut in four sizes: 2, 3, 4 and 5 years. A 4-year size requires 1½ yards of material 35 inches wide. The shoulder box will require 1 yard of ribbon. Price 15c or two for 25c.

No. 6891.—Ladies' morning frock. Cut in eight sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 46-inch size requires 4½ yards of 38-inch material. For contrasting material ¾ yard is required cut crosswise. The width of the dress at the lower edge with plait fullness extended is 2½ yards. Price 15c or two for 25c.

How to Order

Be sure to write plainly, giving name, address, order number and size. Send your order to Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.



Let the taste-test

prove

"There's a Reason"



"Here's a real reason—No trouble, Grape-Nuts is ready to eat."



"What a reason this is!" Grape-Nuts, specially baked, is exceptionally easy to digest.



"An excellent reason here!" Grape-Nuts, with milk or cream, is well-balanced, nourishing—makes the light breakfast safe.

Taste Grape-Nuts. Relish the tasty flavor of these golden brown kernels. Each meaty morsel is oven-crisped to a crunchy, nut-like goodness. And tinged throughout with the ever-so-delicate sweetness of pure malt sugar.

Sheer deliciousness! That's the chief reason why Grape-Nuts is a favorite food on millions of American breakfast tables. Buy it today for breakfast tomorrow.

Grape-Nuts



LOOK! NEW GRAPE-NUTS PACKAGE!

Grape-Nuts now comes in a gay, colorful new package. But the Grape-Nuts in the new package is the same delicious food so popular for many years. Only the package has been changed. Look for it on your grocer's shelves.

Postum Company, Inc., Battle Creek, Michigan.

I want to discover the reasons for myself. Please send me a sample package of Grape-Nuts together with the free booklet "Happier Days in Better Breakfasts."

Name _____

Street _____

City _____

State _____

Zip _____

Fill in completely—print name and address.

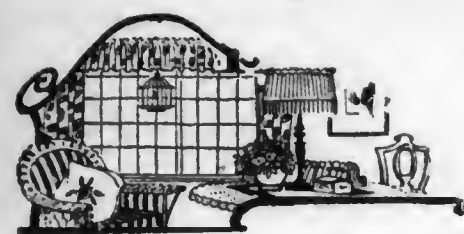
In Canada, address Canadian Postum Company, Ltd., The Sterling Tower,

Toronto 2, Ontario.

© 1939, G. F. Corp.



"I'd clip out this reason!" Grape-Nuts provides many needed vital elements for proper growth and strength of children's bodies.



The Farm Home



Do Your Own Dry Cleaning

By BESSIE L. PUTNAM

EVERY woman who is economically inclined enjoys cleaning her silk and crepe dresses at home if she has a porch on which to do the work. There are preparations on the market which are less inflammable than gasoline. Still one should use all precaution and never, never work with them near a fire. In the country you have special advantages and can surely play safe—and the cleaning is really mere play.

You may get a good cleaning compound at the service station for sixty cents a gallon. Two gallons will clean half a dozen or more silk or crepe dresses, to say nothing of scarfs, ribbons, and gloves—less than the cost of a single dress at a first-class dry cleaning establishment. It is really very easily done, once you know how.

The great secret is in having your dishes perfectly clean. If a pan or pail has been used for other purposes, give it a rub with a cloth moistened with the cleaning solution, even after you think it is clean. Porcelain, granite, or tinware will do the work in a satisfactory manner.

Remove all fancy buckles. If there are spots from ice cream or other sweets, go over them with a cloth dampened in clear warm water before commencing the real cleaning. You will find it hard to locate them after the goods have been wet with the cleaning compound. Set your pail of liquid in a pan of boiling water as it is more effective when heated. Put just enough of the cleaning material in the pail to thoroughly cover a dress and have a second dish of the solution for a fresh rinse after cleaning. Commence with the lightest colored piece you have. Do not rub as this may injure the texture. A soft brush may be used on collars or soiled places. The goods should never be wrung, either by hand or with the wringer. Squeeze as dry as possible. Then pass through a second bath in the same way, dipping up and down and squeezing. Shake out well and place on a hanger or pin at the shoulders and hang in the shade to dry.

Colors will not Run

Then proceed with the next piece of light color, leaving the darker colored things for the last. If a dress is dark with a light vest, do not worry, but treat it as if it were all of one color, and it will come out all right. Add to the solution as it is taken up by the material, just adding enough more to make the work easy. If it gets cold, renew the boiling water, but remember to take the hot water out to your work, never the work near a fire.

By the time your last dresses are ready to hang out the first will be dry and you can see if there are any extra touches needed. If so, put them through a bath of fresh cleaning solution. Shake out, and dry again. They will need no pressing, even though there are small pleats. Let them air until all odor is gone which will require only a short time.

Pour any solution that you may have left into a glass jar and cover tightly. Keep in some building where there is no fire. When the sediment settles pour off the upper part and you have material for doing more cleaning of colored goods.

Play Time Helps

SHOOTING baskets is an excellent pastime for children. Remove the bottom from a peach basket, one of those holding a half bushel, and put a stout wire around the top with a firm loop at one side. Drive hooks in the clothes pole or a fence post, some low for the younger tots and some at regulation height. Hang your basket on one of these, and use any large ball. Patience will develop skill that may be useful in later years when the "tot" makes the high school team.

In place of wooden beads, elbow macaroni may be strung on rainy days and if mother wishes to color it, drop in strong bluing, or in beet juice and spread on a board until thoroughly dry.

Scrambled pictures are the delight of every child, but it is difficult to buy one that is not too complicated. Take any colored picture of a horse, lion, house, flowers or children. Past on a heavy cardboard and cut in triangles, squares, octagons, rectangles, etc., with a sharp knife.



Keep your hats smart and new looking by carefully placing them on a form that can be adjusted to the size needed.

These forms can be had in various colors and a variety of materials—prices ranging from 50c to \$1.75. Write Home Department for information, sending the usual stamped envelope for reply.

Hot Weather Recipes

Spanish Cream

SPANISH cream is one of those desserts cool and light enough for a hot day, and yet satisfying because of the blend of eggs and milk. Almond is a flavoring most people like in Spanish cream served alone or with plain or whipped cream. Vanilla is preferable, if fruit sauce is added. Strawberries, raspberries, sliced peaches or apricots are all excellent accompaniments for Spanish cream. The recipe is from the Bureau of Home Economics of the U. S. Department of Agriculture.

One tablespoon gelatin, one-fourth cup cold water, one quart milk, one-half cup sugar, one-fourth teaspoon salt, four or five eggs, one-fourth teaspoon almond extract, or one teaspoon vanilla. Soak the gelatin in the cold water for five minutes. Heat the milk in a double boiler, and add to it the sugar and the salt. Beat the egg yolks, gradually add the hot milk to them, mix well, pour back into the double boiler, and cook this mixture until it coats a spoon. Remove it from the fire, add the softened gelatin, stir well, and chill until partially set. Beat the custard, add the flavoring, fold in the well-beaten egg whites, pour into individual molds or a pudding dish wet with cold water, and set away to become firm. Serve with cream or with crushed fruit sauce.

Fruit Cup

Many combinations of fruit, fresh or canned, may be used for fruit cup. Use colors that blend or contrast pleasantly and combine acid fruits with sweet, and firm with juicy kinds. Cut large fruits into small attractive pieces, mix lightly so that they keep their shape, sweeten slightly, chill before serving, and garnish the individual servings with sprigs of mint or choice bright-colored fruits.

Good combinations are: Strawberries, oranges and apples. Purple grapes with seeds removed, grapefruit and apricots. Peaches, raspberries and pineapples. Watermelon, honeydew or muskmelon and oranges. Red cherries, pears and green grapes.

EGGS HAVE FOOD VALUES

FOR health, an egg a day for each member of the family over two years of age and an egg yolk for the baby is recommended by the New York state college of home economics at Cornell University.

Eggs are one of the best sources of iron and protein as well as of the vitamins A and D, and they contain phosphorus and lime or calcium. The white of the egg is rich in protein while the yolk contains the greater part of the minerals and vitamins. Since the baby receives protein from his milk, the yolk is the only part of the egg which he needs; older children and adults will benefit from the whole egg.

Waterless Cooking

By HILDA RICHMOND

IF you cannot afford one of the good waterless cookers just now, a very good substitute for steaming may be obtained by putting the vegetables with a very little water in the oven and covering them tightly. For example spinach can be cooked in a glass or earthenware casserole by simply draining and shaking off part of the moisture. Cover and cook till tender in its own juice. Add butter and rings of hard cooked egg and serve right in the dish.

Even a tin coffee can with a little hole punched in the lid so it will not explode will steam new peas in the oven with a few tablespoons of water. They are delicious. Tomatoes can be oven cooked in a can or casserole or even a granite pan with a cover. The popular "five-and-ten" stores often have small pans with rather tight fitting covers well adapted to steaming. We like baked apples steamed for half the time, and then the cover removed to let the fruit brown.

A piece of ham cooked in the oven with a little water in a closely covered kettle is much nicer, we think, than boiled on the stove. It takes longer, but the flavor seems much improved by the slow steaming. Any one who has eaten steamed smoked ham from the pressure cooker knows that it is delicious, and a kettle with a close cover makes a good substitute in the oven.

A friend who makes delicious fried, baked or roast chicken for socials, browns the pieces on top of the stove, packs them in a stone jar with a lid, bakes till tender and takes them piping hot to the supper or dinner. It certainly is "some eating" as the children say.

For Style and Saving

No. 6895.—Girls' dress. Cut in five sizes: 8, 10, 12, 14 and 16 years. A 12-year size requires 3½ yards of material 35 inches wide. For contrasting material ¾ yard is required 35 inches wide, cut crosswise. Price 15c or two for 25c.

No. 6704.—Girls' dress. Cut in four sizes: 2, 3, 4 and 5 years. A 4-year size requires 1½ yards of material 35 inches wide. The shoulder bow will require 1 yard of ribbon. Price 15c or two for 25c.

No. 6891.—Ladies' morning frock. Cut in eight sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 46-inch size requires 4½ yards of 39-inch material. For contrasting material ¾ yard is required cut crosswise. The width of the dress at the lower edge with plait fullness extended is 2½ yards. Price 15c or two for 25c.

How to Order

Be sure to write plainly, giving name, address, order number and size. Send your order to Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.



Let the taste-test

prove

"There's a Reason"



"Here's a helpful reason!"
No fussing. No trouble. Grape-Nuts is ready to serve, ready-to-eat.



"What a reason this is!"
Grape-Nuts, specially baked, is exceptionally easy to digest.



"An excellent reason here!"
Grape-Nuts, with milk or cream, is well-balanced, nourishing—makes the light breakfast safe.



LOOK! NEW GRAPE-NUTS PACKAGE!

Grape-Nuts now comes in a gay, colorful new package. But the Grape-Nuts in the new package is the same delicious food so popular for many years. Only the package has been changed. Look for it on your grocer's shelves.

Taste Grape-Nuts. Relish the tasty flavor of these golden brown kernels. Each meaty morsel is oven-crisped to a crunchy, nut-like goodness. And tinged throughout with the ever-so-delicate sweetness of pure malt sugar.

Sheer deliciousness! That's the chief reason why Grape-Nuts is a favorite food on millions of American breakfast tables. Buy it today for breakfast tomorrow.

Grape-Nuts

POSTUM COMPANY, INC., Battle Creek, Michigan. © B.F.F. 8-39.
I want to discover the reasons for myself. Please send me a sample package of Grape-Nuts, together with the free booklet "Happier Days from Better Breakfasts."
Name _____
Street _____
City _____
(Fill in completely—print name and address)
In Canada, address Canadian Postum Company, Ltd., The Sterling Tower, Toronto 2, Ontario. © 1939, G. F. Corp.



"I'd clip out this reason!"
Grape-Nuts provides many needed vital elements for proper growth and strength of children's bodies.



IT'S WISE TO CHOOSE A SIX

Six-cylinder performance without added cost for gas, oil or upkeep

The swing to the Six in the low-price field grows steadily bigger and more impressive every day. Farm owners especially are rapidly learning that the new Chevrolet not only gives all the advantages of six-cylinder smoothness, power, flexibility and comfort—but does so without added cost for operation or upkeep.

In a recent officially-observed economy run, a Chevrolet six-cylinder Coach won first place, averaging better than twenty miles to the gallon. And no automobile surpasses Chevrolet in oil economy or shows a lower expense for tires. None offers owners the benefits of more efficient service than that available at more than 10,000 authorized Chevrolet service stations, where, on many service and repair operations, the flat-rate charges are the lowest in the automotive industry.

And Chevrolet six-cylinder smoothness saves the entire car from the wear of constant vibration, lowering the cost



The Coach, \$565, f. o. b. factory, Flint, Michigan



of maintenance and assuring a longer-lived automobile. Before you decide on any car in the low-price field, be sure to try out the Chevrolet Six. Learn for yourself what a difference six cylinders make. Note how smoothly and quietly the power flows—how easily Chevrolet climbs steep hills—pulls through mud and sand—maintains top speeds.

Know the advantages of such modern features as Fisher body—semi-elliptic springs—Lovejoy hydraulic shock absorbers—weatherproof 4-wheel brakes—safety gasoline tank in the rear of the car. Find out the small down payment and easy G.M.A.C. terms available to every Chevrolet buyer.

Then you will realize why more and more motorists everywhere are finding it wise to choose a Chevrolet Six—for economy, for performance, for beauty, for comfort, for safety—for lasting enjoyment and satisfaction!

CHEVROLET MOTOR COMPANY, DETROIT, MICHIGAN
Division of General Motors Corporation

CHEVROLET SIX

Sport Roadster	\$555	Club Sedan	\$665	ROADSTER or PHAETON	Sedan Delivery	\$595	1 1/2 Ton Chassis	\$520
Coach	\$565	Sedan	\$675		Light Delivery	\$365	With Cab	\$625
Coupe	\$565	Special Sedan	\$725		Chassis	\$365	Prices f. o. b. factory	
Sport Coupe	\$655	6 wire wheels standard on Special Sedan			Roadster Delivery	\$440	Flint, Mich., special equipment extra.	

\$495



Game Getters Every One

WHAT style of gun do you like? What kind of game do you hunt? The answer to these questions will tell you which Remington to select. Each one represents the finest in its particular class.

The new Model 29, pump action shotgun, 12 gauge was introduced last year. Its many improvements appealed to sportsmen at once and it is already a popular favorite for both wild fowl and upland shooting. It is famous for its smooth, fast action and graceful appearance.

Those who prefer a 20 gauge find in the Model 17 everything that could be desired—light weight, attractive lines and finish, and the smoothest action ever developed for a repeating shotgun.

The Model 14 Slide Action Repeating Rifle is popular for deer, moose, elk, mountain sheep, bear, and other big game.

Model 25 is smaller, but it will kill a deer. It is the nearest thing to an all-purpose rifle you will find.

The famous .22 caliber Remingtons—Model 24 Autoloader, and Model 12 Slide Action Repeater, are unsurpassed for small game and for killing farm pests.

Every Remington is accurate, well balanced, and beautifully made of the finest materials. You can see these Remingtons at your dealer's. Or, if he hasn't them in stock, ask us for a circular describing the gun you want. Show this to your dealer, point out the gun you have selected, and he can get it for you quickly.

REMINGTON ARMS COMPANY, Inc.
Originators of Kleanbore Ammunition
25 Broadway New York City

Remington

THE YOUNG PEOPLE

How I Spent My Vacation

ALTHOUGH I didn't take what you would call a real trip, my vacation was interesting anyway, especially to one who lives in a town during the winter, for I spent my vacation just being a "Pennsylvania Farmer."

I migrated from the southern part of Western Pennsylvania to the northern part in June. My special care here is the flower garden. Being a very natural garden, of course it has many weeds in it which must be taken out. When the weeds are out and the flowers are blooming it is a very pretty place. We have gladiolus, dahlias, snapdragons, asters, larkspur and many other flowers.

Beside the flower garden we have built a rock garden and a lily pool. The rock garden is very pretty but of course it gets weedy, too. The lily pool is most interesting to us and to all the neighbors. We have goldfish, frogs and tadpoles in it and some very pretty water lilies and water hyacinths.

I have always been anxious to have a wild flower garden so this year my longing was satisfied. I went to the woods with my basket and shovel and it wasn't long until I found a big clump of jack-in-the-pulpits beside an old stump. I found some white violets—they must have bloomed twice—some devil's paintbrush and many other flowers.

We have a nice swimming hole near us and we also have a canoe for the creek, so you know we have had lots of fun there.

Besides all this farming if that's what you'd call it I was also at a training camp, for a week, which was held up in the mountains. It was a training camp for the girls of Western Pennsylvania who belong to a club sponsored by the Y. M. C. A. We had a wonderful time besides learning a lot that will help us next year.

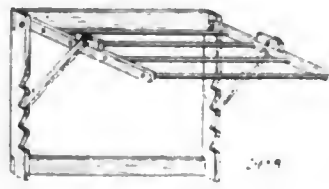
I have certainly enjoyed my summer vacation and I'm sorry that it will be over so soon.

Martha F. Darsie.

Folding Rack

ANY farm boy can make this folding clothes-drying rack, as shown in the diagram (D-688). Get some broom handles, some one-by-two-inch lumber in three and four-foot lengths, four small bolts about two and one-fourth inches long, a few screws and nails, hammer, saw, and a brace and three-fourths inch bit to enter ends of broom handles into the two side bars. The method of construction is evident from the diagram.

We have two of these racks near our kitchen range where there is



about six feet of clear wall space. They come in handy every day to dry children's clothes and small articles that we do not wish to put on the line. They are out of the way and out of children's reach. Also on stormy days the family wash can be dried in a day. The higher up on the wall the rack is placed, the quicker the clothes will dry. When in highest position, the bars are above one's head to avoid bumping, and when lowered it is very convenient to place on and take off clothes. It has many advantages over rope lines.

A few screws at the top will hold it securely to the wall. It is always there and ready, but out of the way. If properly made with offsetting bolts as shown in drawing, it will fold flat against the wall.

I. W. D.



Drawn by Barbara Shoemaker, Penn's DON'T YOU LOVE THE RAIN?

Don't you love to be in rain;
To go splashing down the street
With the streamlets on your raincoat
And the rivers round your feet?
Don't you love to watch the rain
Dancing on your window-pane,
Then joining all and running on;
I say, don't you love the rain?
Pennsylvania. Ann Morrison.

Shenandoah Valley Reader

I LIVE in the Shenandoah Valley of Virginia. It is two miles to our school and three miles to our church. We live on a good road. Our house is over one hundred years old.

We are very fortunate in having a creek running through our place. It is a good place for bathing and a wonderful place for our cattle, owing to the dry weather of the season.

During harvest season I am busy helping my father to haul hay and wheat. I like it very much.

We raise horses, cows, and sheep on our farm. I am especially fond of the horses. We also raise lots of hogs in the winter time. We raise chickens, guineas and geese. But best of all I like our old Shepherd dog. He likes to go with me to the meadow for the cows. He is especially fond of the sheep. He drives them very carefully.

One day as I was walking along the creek below a very steep bluff a snake fell at my feet. I was scared at first, but saw it was only a water snake and after throwing several rocks at him I killed him.

I like to live on a farm in the country. The young people of the country today have a very promising future with all of the new ways and the modern conveniences on the farm. I think the young people of the city are losing half of their lives by not taking advantage of the healthy farm life.

Virginia. Hattie R. Diehl.

A Game or Two

P's and Q's

PLAYERS sit in circle and one stands in middle, asking each in turn a question as: "The Sultan of Turkey has gone forth to battle. Tell me where he has gone, but mind your P's and Q's." The one questioned must answer before questioner counts ten, naming a city in Turkey beginning with the letter before P in the order of the alphabet. Other questions which can be asked are: "The circus has come to town; tell which animal roared the loudest? Which came from Africa? Which has horns and hoofs?" etc. Each person must answer quickly or lose his place in the game.

Pop-ity-pop

PLAYERS seated in circle. "It" in ter points fingers at some player and says, "Pop-ity-pop!" Other player tries to say "Pop" before "It" completes his word. If not successful, he must change places with "It." If cir-

cle is large, have several players in center at once. When "It" points finger without saying anything, the player must maintain silence.

Animal Alphabet

TWO sides; person from each side names animal beginning with letter "a." Alternate in turn until a player cannot think of any more "a" animals. That side gives up a player to other side. Begin again with "b," etc. Time limit. Side having more players wins.

Beast, Bird, Fish

PLAYERS are seated in a circle. One player stands in the center with a soft ball made by crushing paper or knotting up a handkerchief. This is thrown at one of the players by the one in the center, who says quickly, "Beast, bird, or fish," then repeats one of these classes and immediately counts ten. The player designated must name some beast, bird or fish, according to the class last named by the thrower, before the latter has finished counting ten. Failing to do so, he changes places with thrower.

"Narion" Contest

- | | |
|------------------------------------|-----------------|
| 1. A popular flower. | Carnation |
| 2. To give. | Donation |
| 3. Putting off. | Procrastination |
| 4. The taking of vows. | Ordination |
| 5. "Seeing things." | Hallucination |
| 6. Ordered by the Board of Health. | Vaccination |
| 7. Common in Russia. | Assassination |
| 8. One's fancy. | Imagination |
| 9. Disobedience. | Insubordination |
| 10. The end. | Termination |

Little Folks' Corner

The Housekeeping Adventures of Timmy Twitchet

By RUTH PLUMLY THOMPSON

(Continued from last week.)

One night as he and Bobby sat discussing the matter over a glass of cider, they were surprised to hear a rumbling outside. "What can that be?" Timmy cried springing up in alarm. "Sounds like—" Bobby got no further, for right on the heels of the thunder came a terrible slam, the house shook all over, the lamp fell on the floor and smashed to bits, it grew dark, well, as dark as an attic can be at night. For five minutes Timmy and his friend did not move. Then, as nothing more seemed to be happening, Timmy crawled cautiously out from beneath the piano, where he had rolled, and felt in his pocket for a match.

"Are you hurt?" quavered Bobby tremulously from under the sofa. "Seem to have twisted my tail and there's a lump coming on my head," replied Timmy, as he found the match. "How about you?" holding the flickering light above Bobby.

"A little shaken, thank you!" Bobby scrambled to his feet and both stared about uneasily, but still nothing else happened. "Suppose we look out and see what it was," suggested Timmy bravely. Fetching a candle from the kitchen the two went to the front door, but it wouldn't open. They pushed and shoved till they were red in the face, but could not budge it. "That's funny," said Timmy. "It never stuck before!"

They ran upstairs as fast as they could pattered and threw up the windows. Timmy thrust his head impulsively out the window. Another lump began to come, for he had bumped his head on something, and before he could say anything Bobby had bumped his head. It was very painful, as well as provoking.

Uncle Toby

By EVA L. HUGHES

My Uncle Toby used to be—
The captain of a ship.
And once, a long, long time ago,
He made a whaling trip!

He has a twinkle in his eyes
And likes to joke a lot.
But I'm not always certain
If he's teasing me or not.

He took me for a cruise one time,
'Way off upon the sea.
And when we went aboard the ship
He turned and said to me:

"Now mind that you behave yourself,
And don't you cry or tease,
For sometimes on the ocean
There comes up a SPANKING breeze!"

MY LITTLE VISITOR

A little white bunny with pretty pink eyes
The cutest thing I have ever seen,
Hopped in my garden a short time ago
And nibbled my cabbage green.

He sampled the lettuce and radishes, too,
Then tasted my lovely red rose,
And never said "Thank you" when he
Went away;
Just wiggled his short, funny nose.

I think he should have better manners
Than that
When he visits my garden each day.
But I'm sure he appreciates all the good
Things;
So I shall not drive him away.
West Virginia. Zora Wolfe.

The Right Word

Judge O'Flaherty: "Haven't you been before me before?"
Prisoner: "No, y'r honor. Ol niver saw but wan face that looked like yours, an' that was a photograph of an Irish king."
Judge O'Flaherty: "Discharged!" call the next case.—Public Opinion.

PASSING EVENTS IN PICTURES



1. "Gallant Fox", unbeaten three-year-old, has a good chance to beat Zev's world record for winnings. The "Fox" is training for coming races at Saratoga Springs, N. Y.

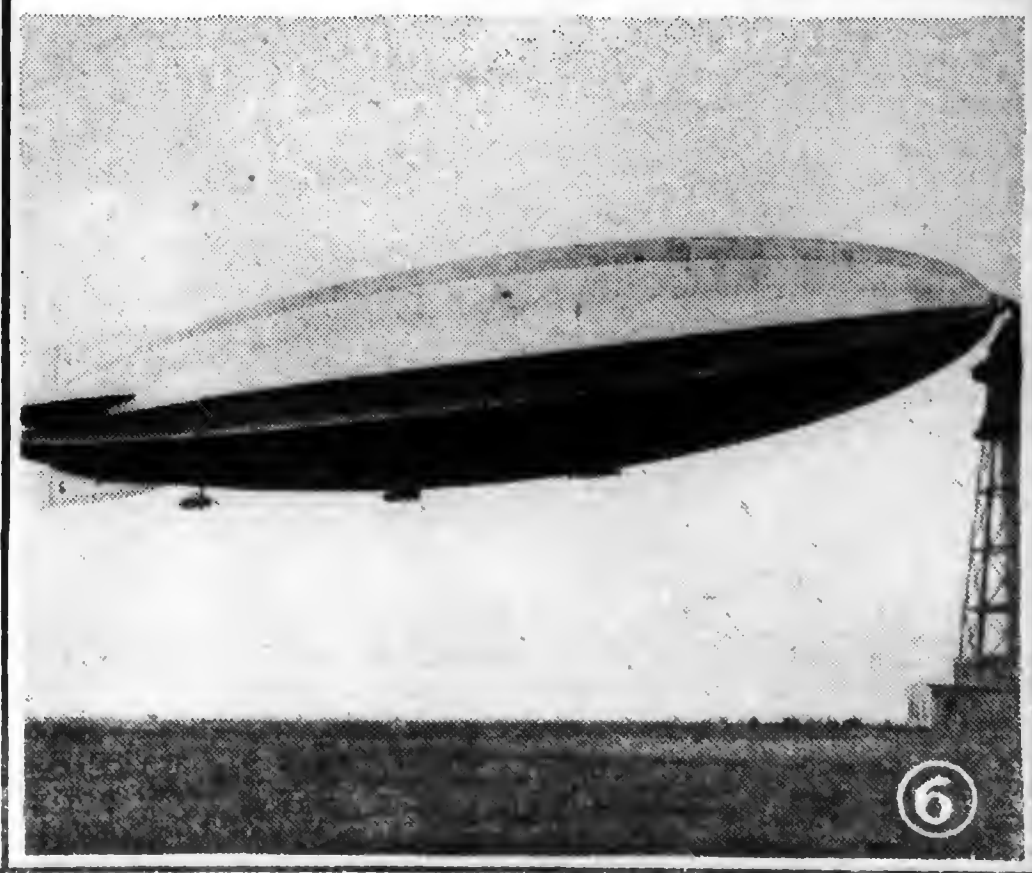
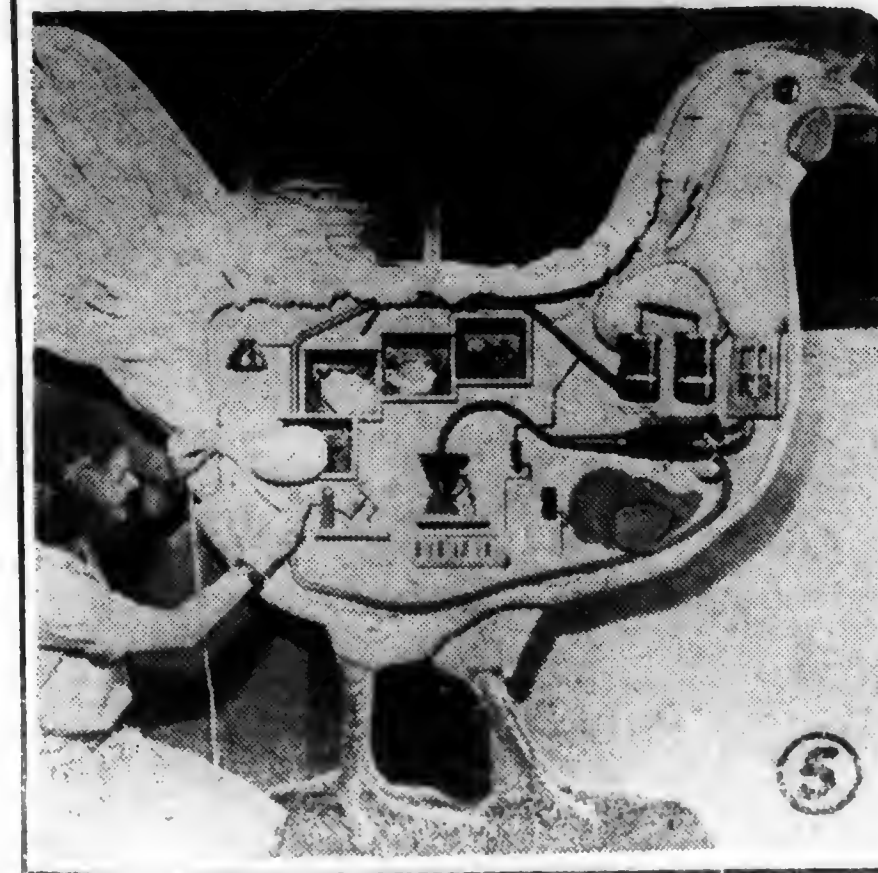
2. Towers of business. This photograph made from the top of the Medinah Athletic Club gives one a good idea of how Chicago grows upward as well as outward.

3. Left to right: Arthur Williams, Jr., of Rhode Island, winner of the 1930 Thomas A. Edison scholarship with 92.7 in technical subjects and a general average of 91.1 (unusually high); Thomas A. Edison, the famous inventor; and Wilbur Ruston of Seattle, Wash., on the estate of the electrical wizard at West Orange, N. J.

4. Flour mill recently put into operation which will afford a market for grain from Pennsylvania and Ohio.

5. A gigantic hen, seven feet tall, speaking English, French and Spanish, which lays wooden eggs, occupies a prominent position in the Department of Agriculture's exhibit at the London Poultry Congress.

6. An excellent shot of the great British dirigible R-100 attached to the new 110-foot mooring mast at the St. Hubert Airport, Montreal, after its record crossing of the Atlantic from Cardington, England, in 78 hours 51 minutes.



A Peruvian Market Place

(Continued from page 8.)

these were bird eggs, but what kind I could not ascertain. For I was the only person in all the throng who didn't speak Spanish. I was also the tallest of them all, for most of the Peruvians are short, many of them almost dwarfs in stature. Some of the Indian fat women look about as wide as long.

The meat market was interesting for several reasons. There were no fat meats except pork. Beef, veal and mutton were all lean—not a single fat carcass or part of carcass visible. All meats are sold by weight, and many of the sales are incredibly small—a few ounces sometimes and often less than a pound. The cattle carcasses were light—in fact all the carcasses were light except hogs, which were heavy and fat. Kids were offered both in whole carcasses and in sections. The kids and lambs looked better to me than any of the other meats. I watched a butcher prepare a lamb's head for a customer who wanted only half of it. The butcher did his work well, cleaning the head so that his customer could have half of the head and half of the brain, even half of the teeth, but the tongue was not divided. The half that contained the tongue was held at a higher price than the other half, so that buyer took the tongueless fraction and went away with it.

So far as I could see there was not a cleaver or a saw in use in all this meat market. A big ax with a very short handle is used for the heavy work. A knife with a long heavy blade, an elongated triangle in shape, is used for the lighter work on meats and for heavy work on fish. The salesman has a substantial club about 18 inches long, and with this he hits the top of this knife and makes a clean, smooth cut through a rib of lamb or the backbone of a big fish. This knife and club combination seemed to me a pretty good one, as it was both effective and speedy. The feet of cattle, calves and sheep were on sale, all but the calves' feet having the horny part of the hoofs on. Bones nearly or entirely meatless were available for soup making.

A Suspicious Move

Unconsciously I created a mild sensation in the live poultry division. Thinking that I would put down the breeds of poultry with which I was familiar I took out a pencil and a piece of paper. I found little to write, but the sellers evidently suspected something, for they gathered around me and a policeman came up because he saw the crowd. I knew no Spanish, he knew no English, but I finally found one word and he understood and explained to the crowd. Everybody laughed. I gave the officer a Pittsburgh story and we parted with mutual esteem.

The only familiar breed in the live poultry market was a game rooster. Two breeds of games were on sale, the one new to me being a combination of white and bay—the marks very distinct and not running together. The other chickens were mainly of mixed breeding, but a few white ones were seen that were neither Leghorns nor Plymouth Rocks.

The turkeys were white and bronze—not very large. A white goose with a red head, and a green and grey goose with the same kind of a head were both new to me. The pigeons were a mixture of slate and black. A white duck with a black stripe on its head appeared to me to be the best of its kind.

There are many things I have not mentioned. Baskets of all kinds and colors from the capacity of a barrel down. Great strings of short-linked sausages, some of them a bright red, some yellow and others natural color. All kinds of tropical fruits, one or two unknown to our markets but

good here where they grow. Great tubs of olives in pickle and not good to look at. Strips of meat dyed yellow—for what reason I could not ascertain—and strings of onions of all colors and rich odors.

Seeing a crowd on the street adjacent to the market I edged in. It was gathered about a Chinaman who had a motorcycle with a side car, the latter a storage for candles, the top of it a table whereon he operated a little roulette wheel. For a copper coin he sold the numbers on the dial, then he rolled the ball and the holders of the winning numbers got the

and the baby rides in perfect comfort.

Donkey and oxcarts are seen about the market. One donkey cart had rubber-tire wheels—old automobile castings bolted onto the felloes. A horse stood outside the market hobbled in a way new to me. His head was drawn down to the level of his knees then the rope looped about both forelegs just above the knees and tied between them. Another hobble common here is a strap about the horse's ankles. The split rein of our western plains, which is the best way to keep a horse from straying, seems to be unknown here.

The legend that the llama can estimate within a few ounces the weight of its burden appears to have a very shaky foundation. From veterans who have used llamas I learn that some of them can carry 110 pounds, some not

which takes place when the wash hardens or cures.

"Portland cement and clean water are mixed together in such proportions that a mixture of good painting consistency is obtained. Ordinarily one pound of water to two pounds of cement will give about the right consistency. If the wash is too thin or too thick it will not brush on smoothly. In our experiments we used powdered iron in the proportions of 25 to 50 per cent of the weight of the cement in the wash. Results to date do not indicate that anything is to be gained by using the larger amount of powdered iron. As the powdered iron adds considerably to the cost of the mixture it seems unwise to use more than 25 per cent.

"This wash goes on readily with a soft fibred broom or calcimine brush. The wash must be stirred constantly as the particles of iron being heavier than the cement would otherwise settle out of the mixture. The wash should be put on in a smooth coating and should be heavy enough to fill all roughened areas.

"Just as soon as the wash has hardened enough to be undamaged by sprinkling it should be moistened as often as necessary to keep it continually wet for at least 48 hours. Every effort should be made to prevent the evaporation of the water from the wash such as closing silo doors and covering the silo with a tarpaulin in case it does not have a roof. The wash should be allowed to cure for at least ten days before the silo is filled.

"As mentioned previously in this report the magnesium fluosilicate can be used as a surface application over a cement wash or it can be incorporated in the wash. In either event the preparation of the wall surface, method of application and method of curing are the same as for the cement wash-powdered iron treatment.

"Where used as an admixture in a cement wash the magnesium fluosilicate solution was added to the mixing water at the ratio of one pint of solution for each gallon of mixing water. The surface application is made by painting the surface with full strength solution of a commercial preparation or of a prepared solution of magnesium fluosilicate. A prepared solution is made by dissolving four pounds of magnesium fluosilicate crystals in one gallon of water."

Pennsylvanians In The Great Northwest

(Continued from page 5.)

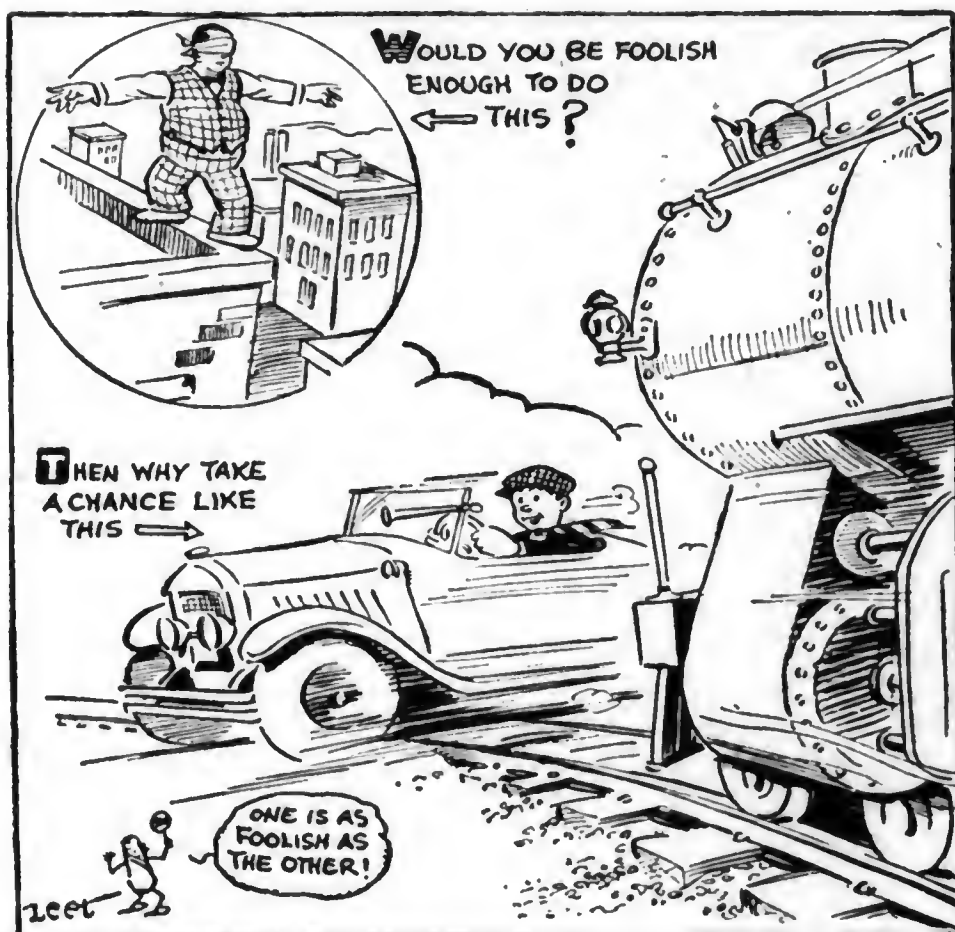
on this trip. No one would have guessed it to walk through the cars the first night out. If any were troubled by the mysteries of a sleeper they didn't show it. Very soon after our first stop at flood-lighted Niagara Falls nearly every berth was dark. The movement of the train had a soothing effect on many. One old lady said she would have to get some one to rock her to sleep when she reached home again. A poet expressed it very well in a verse which Isaac Rishel of York county turned in for the little newspaper that was published on the Tour Special:

Shooting under arches,
Rumbling over bridges,
Whizzing through the mountains,
Buzzing o'er the vale,
Bless me, this is pleasant,
Riding on the rail.

"It is all so different from what I expected." That expression was heard scores of times on Chicago's boulevard, out through the Dakota-Montana wheat fields, in the Rockies and Cascades, in the beautiful, flowing cities of British Columbia, Washington and Oregon, along the backbone of the Rockies in Glacier and Yellowstone Parks.

We were all being surprised at every turn, but not about the same things. Our varying backgrounds and interests made the tour story for each of us as different as if we had traveled on different routes.

(To be continued.)



Open season for speed lunatics.

chocolate and the others lost their coin. Another fellow had a similar device, minus the motorcycle.

The Peruvians are great gamblers and this man's sure-thing chocolate seller appeals to their desire to take a chance. Sellers of lottery tickets are everywhere. One woman with a baby on her back sold them in front of the Hotel Bolivar. Several times I watched the process whereby the Indian woman puts her youngster on her back. I can't describe it so that the reader will understand, but the Indian woman does it quickly and well.

Preparation for Silo Walls

By R. U. BLASINGAME

WE have inquiries from time to time from our readers with regard to treating the inside of silo walls to prevent the spoiling of silage. Following are some results obtained from studies conducted by the Portland Cement Association:

"During the past five years the Association has been experimenting with various materials as a surfacing for concrete silos.

"Materials used in this series of tests included a wide range of cement washes, with and without admixtures, bituminous coatings and a number of commercial preparations. In general the bituminous materials have proved uniformly unsatisfactory in that they came off after two or three years service. In the cement wash treatments, those containing powdered iron are making an excellent showing. A commercial prepara-

over 85 pounds, but none of them will attempt to carry more than it can. It will lie down whenever its load exceeds its ability, no matter what the load weighs. A mule will try to carry whatever load its owner imposes, but a llama won't attempt more than it can take the whole distance. Llamas are little used now except in very high altitudes, though one train of them came down to Arica when we were there a few days ago. A mule can't work above 16,000 feet and can't do hard work at that height, but a llama can go anywhere a man can go.

tion that has proved the most satisfactory is a colorless liquid (magnesium fluosilicate) and is giving good results both as a surface application and as an admixture in a cement wash. The following description will deal with the cement wash-powdered iron and magnesium fluosilicate treatments.

"On a resurfacing job it is very important that the old wall be thoroughly cleaned. All loose or scaly materials must be removed by chisels, sand blasting, wire brushing or any other means that will expose a hard clean surface on which to apply the new wash. The surface after being cleaned should be kept constantly damp for two hours prior to the application of the wash. This is essential in order to secure proper bond and to prevent the wall from absorbing water from the wash. This water is necessary for the chemical reaction

Truck Crops

By GILBERT S. WATTS

WITH the very dry weather that is prevailing in most sections worms are almost certain to destroy the late cabbage unless effective measures of control are carried out at once. On fertile soils in seasons of abundant rainfall cabbage is capable, to a considerable extent, of outgrowing the attacks of worms. But not so now. The very hearts are being eaten out of unprotected plants.

Fortunately expensive equipment is not required to combat these pests successfully. An effective dust may be prepared by mixing one part of lead arsenate or calcium arsenate with five parts of wheat flour having a high gluten content (12 per cent). This may be economically dusted into the centers of the plants by means of simple tin can sifters, an operation that should be performed early in the morning while the air is calm and dew is on the plants. Hydrated lime may be used instead of the flour but does not stick as well. Several applications may be required.

It may be of interest to some that four two-bottom 18-inch "corn borers" plow working in very dry soil cleanly turned under a heavy growth of red raspberries at the close of the picking season. The whole mass was put under from the standing position without previous disking or dragging. A winter cover crop will be grown.

Tomatoes Rot

There are about one-quarter of an acre of tomatoes trained on poles six feet in height. The vines are as tall as the poles, some higher. They are fine and healthy looking, loaded with fruit. The young tomatoes rot on the stalk. The rot begins in the form of a dark green speck or specks at the blossom end. In a few days these specks unite into a solid blotch of dark green which becomes darker as the days go by, finally turning into a rotten mass. I pick many of these off, but others only come to take their place. The vines are yielding quite a few ripe fruits which are perfect, but at the same time almost half of the crop is lost due to the rot. Walter C. Kehr.

NOT only your field but countless other plantings of tomatoes are being seriously affected this year by the trouble known as blossom end rot. This is unquestionably the result of the widely prevalent drought experienced during recent weeks. Blossom end rot rarely causes appreciable losses in seasons of adequate and evenly distributed rainfall. Spraying is not an effective method of control. Irrigation where practicable is relief likely to afford a measure of relief but many cracked tomatoes probably will be produced for a week or more when water is applied after the soil has become very dry. Light applications at first will minimize losses from this cause.

As a preventive measure it is worth while to avoid planting tomatoes on soils that are inclined to be drouthy and to choose sites that are well supplied with organic matter. G. S. W.

Club Root in Cabbage

"Can any one tell me how to prevent club root in cabbage?"
Cambria Co., Pa. Mrs. Leo Balch.

GROW the plants in soil that has not been used to produce cabbage in at least six years and that is not situated where it would receive storm water or wash from higher land that has been used for cabbage.

Plant on land that has not been used for cabbage within five years. Harrow in a good application of lime, preferably pulverized limestone, before setting the plants.

Do not apply manure from animals that have been fed cabbage infected with club root. Be careful not to carry soil from infected land to clean land on harrows, plows or hand tools.



BRING THE TOWN CLOSER WITH Orange AMERICAN GAS

Orange AMERICAN GAS brings you closer to town--cuts the distance between farm and railroad--in more ways than one!

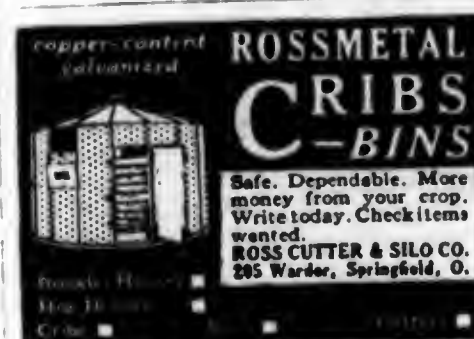
Orange AMERICAN GAS gives you more miles per gallon than other gasolines selling at the price of regular gasoline--and that certainly makes town seem closer.

And in addition to the saving on fuel cost, there's the time saved on the road--due to the surplus power that carries a heavily-loaded truck over stiff hills with fewer changes of gear.

Give Orange AMERICAN GAS a real test--in your truck, in your tractor, in the family car! The harder the task--the better the showing this better gas will make. And it sells for the same price as regular gasoline!

Try it at your nearest AMOCO dealer.
There's one close by.

The AMERICAN OIL COMPANY
Affiliated with Pan American Petroleum & Transport Company
General Offices: American Building
Baltimore, Md.



Every Advertisement

in this paper is a buying guide to better value. Read all the advertisements--big and little. Make it a habit. If there is not sufficient information in the advertisement itself upon which to base judgment, write to the advertiser for his printed matter. If you have a definite problem that the advertiser should be able to help you solve, assuming of course that your problem touches the goods he manufactures, write to him for specific information. Tell him that you saw his advertisement in this publication and you will receive prompt and courteous attention. The Advertisements are friends of your pocketbook.



You Can Get This Cleanest and Brightest-Burning Kerosene

WHETHER used for lamps or lanterns, for cooking, heating or power, Freedom Kerosene, made from 100% Pennsylvania Crude Oil, is better. This superior fuel burns with a clear, clean, hot flame that gives most light or heat per gallon consumed. For tractor or other engine use it has power and pep far beyond that of ordinary kerosene. For use with insecticides, or fungicides, it has no equal.

PS. And for your Motor Cars Trucks and Tractors.

FREEDOM Ethyl Gasoline
FREEDOM Golden Gasoline
FREEDOM Perfect Motor Oil
FREEDOM Tractor Oils

Everybody cannot get Freedom Kerosene. But if you live in the territory shown above our trucks will make prompt delivery right to your door at no increase in price.

There is a Freedom branch located in every city shown on the above map. Phone or write the nearest branch for a trial order of Freedom, the better grade Kerosene, sold at no extra cost.

THE FREEDOM OIL WORKS CO.
 FREEDOM, PENNA.

FREEDOM KEROSENE

BE SURE TO SAY "I saw your advertisement in Pennsylvania Farmer" when writing advertisers.

Set a UNADILLA Silo on guard over your corn crop!

You can depend on the Unadilla Silo to safeguard you against loss of your coming corn crop under any and all conditions. Should your corn fail to mature, happen to get nipped by unexpected frost or become infested with corn borers, ensile it in a Unadilla. Prime, palatable juicy, nutritious feed will result.

If your crop is threatened by borers by all means ensile it in a Unadilla. The worms will be destroyed and your winter feed saved at one and the same time.

Don't put off this important matter! Order your Unadilla at once and be all set for any emergency! You can't go wrong in doing this because the Unadilla Silo is not only the strongest built but is the easiest of all to set up and use.

We can guarantee at once shipment of any size Silo in either Oregon Fir or Spruce. Material bone dry and the best quality obtainable. Liberal discount for cash on delivery or you can buy on time. Prices promptly quoted. Write at once for big free catalog. Address:

UNADILLA
 SILO CO., Inc.
 Box P
 Unadilla, N. Y.

We are sales agents for Pape and Rowell-Trojan Cutters in non-conflicting territory. Write for catalog and prices.

New Pennsylvania Milk Law

By RALPH E. IRWIN
 Bureau of Milk Control

SECTION 4 of Act 428 gives the designations or grades that may be used in selling milk to the consumer. The designations "raw milk" and "pasteurized milk" will no doubt be in general use. The requirements for the use of these are given in Sections 6 and 7.

How do the requirements of Section 6 of Act No. 428 and the Act in general affect the producer and distributor of raw milk? In Pennsylvania there are approximately three million people using raw milk. Just how many distributors furnish these consumers will not be known until each distributor applies for a permit. It is estimated that the number of raw milk distributors is five or six times greater than pasteurized milk distributors, although there is about twice as much pasteurized milk used as raw milk.

Each application for a state permit to sell raw milk gives the amount of milk the applicant is selling. This information is of interest when considering the requirements for the sale of raw milk. The first two thousand applications for permits to sell raw milk show a total of 224,000 quarts sold daily. This is an average of 112 quarts for each applicant. One thousand three hundred and seventeen or 65.85 per cent of these distributors sell 100 quarts or less daily. In fact 26½ per cent sell 50 quarts or less.

The following table is of interest:

Quarts Sold Daily	Number of Applicants	Per Cent
1-10	265	13.25
11-25	265	13.25
26-50	331	16.55
51-100	458	22.80
101-150	279	13.95
151-200	175	8.75
201-300	132	6.60
301-500	72	3.60
500 and over	25	1.25
Total	2,000	100

We may expect that several of those now selling 500 quarts or more will change to pasteurized milk. It is apparent, therefore, that our problem concerning the sale of raw milk is the preparation of clean safe milk by distributors of 100 quarts or less.

The term raw milk is applied to milk sold to the consumer without being pasteurized. Such milk is usually delivered to the home as prepared on the dairy farm. Therefore, the milk should be protected from the cow to the consumer.

In accordance with Section 6 raw milk must be obtained from cows that have been tuberculin tested under the Individual Accredited Herd Plan or the Modified Accredited Area Plan as set forth by the State Department of Agriculture. It has been illegal to sell raw milk from untested herds since April 4, 1923. Still almost daily requests are received for permission to continue the sale of milk from untested herds after September 1, 1930.

General Requirements

The Act requires that the cows shall be fed, watered, housed and cared for in such a manner that the milk will be clean and safe. These are general requirements and give the distributor freedom in choosing methods and equipment. Many applicants request specific directions. These the Department of Health may give in the form of recommendations. Such a procedure is no doubt ideal but requires much time.

The housing of the cows and the construction of stables is given in detail in many city ordinances. These differ greatly but we are at liberty to choose what is best from the work carried on through city supervision, milk distributors, and organizations representing the producer. From experience it seems proper to have the place where the cows are milked pro-

vided with a dry tight floor, a tight ceiling or floor above the cows, smooth walls and plenty of light and ventilation.

Recently a raw milk dairy farm was visited. The cows were apparently in excellent condition. The dairyman explained this was because the cows were given a chance to keep themselves clean. The yard was well drained, the manure pile was in an enclosure adjacent to the barnyard. The stanchions were designed to give freedom. The floor was of concrete with a gutter. The floor above the stable was tight and clean. The walls were smooth and clean. Ventilation and light came through windows tilted in at the top. There was nothing elaborate but everything seemed adequate.

The cows were curried and washed about the flanks and udders only when occasion demanded. The milkers milked with clean dry hands into open top buckets and poured the milk into cans located in the entrance to the stable, straining when necessary. The night's milk was water cooled in covered cans without stirring. The morning's milk was cooled on a surface cooler and run direct to the bottle filler.

Fly Protection

The milk was handled in a two room milk house. One room contained the steam boiler, bottle washer, steam cabinet and cooling tank. The second room contained the bottle filling and capping machine and cleaned milk bottles and utensils. Everything was of plain construction, adequate in capacity and in good repair. From this farm went a clean safe milk that had given satisfaction for over 18 years and returned a profit. Those in charge believe they have a right to be proud of their farm and products. The farm just described complies with Act No. 428.

Of course, some desire a milking room of two or three stalls and allow the cows freedom in a covered yard. Others use a milking machine. Some bottle the milk warm and cool it in the bottles. The variations may be many since the law is given in general terms. It is clear that flies are not to be a part of our milk supply. Neither are flies to have access to cleansed containers and utensils. This protection is important and difficult. The second room in the milk house where the milk is bottled and cleansed containers are stored is recommended in order to assist in fly protection.

Clean Containers

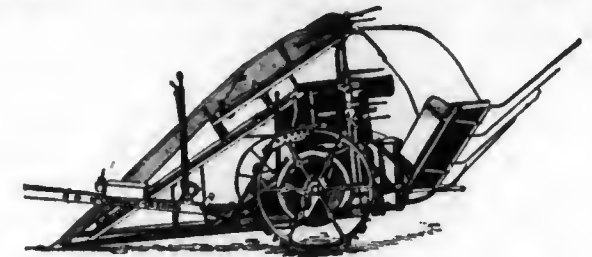
Likewise heat is necessary for the cleansing of utensils and containers on farms producing raw milk or in milk plants preparing raw milk. Steam or hot water is generally used. Equipment for the cleansing of bottles with steam or hot water is now available at reasonable prices. The raw milk distributor who sells but a few quarts each day may use containers furnished by the consumer ready for filling. This relieves the distributor of making provision for cleansing containers and filling and capping bottles.

When milk is produced for pasteurization the producer is not required to provide heat for sterilizing containers and equipment. The cans are to be cleansed at the point of delivery and returned in suitable condition to receive milk.

When milk is produced for pasteurization the milk house may be of one room and used for cooling milk and storing cleansed containers and utensils. The location of the milk house depends somewhat on the manner in which the milk is handled. If the milk is aerated or cooled on a surface cooler so that the milk is exposed, the milk house should be lo-

Be Ready When the Corn is Ripe

... with
McCORMICK-DEERING Equipment



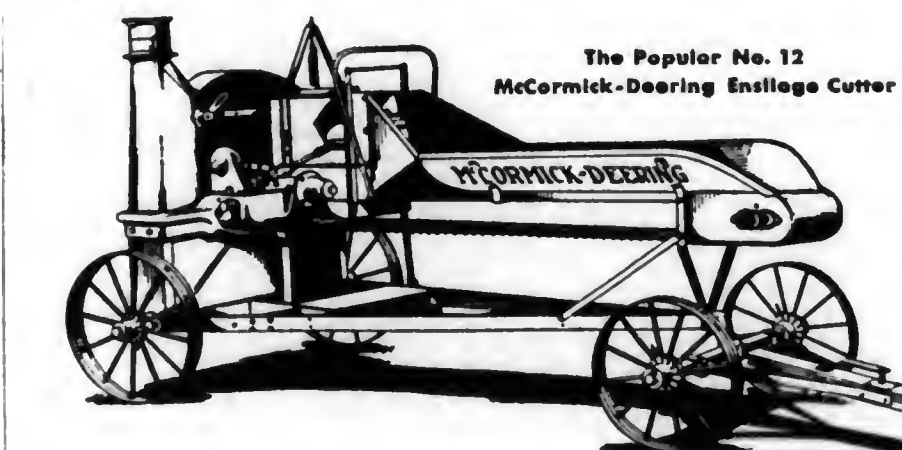
WHEN your corn is ready to cut, depend on the McCormick-Deering Corn Binder to do the heavy job for you in short order. It has years of successful performance back of it. You can have your choice of either a vertical or horizontal binder. The McCormick-

Deering does a clean job whatever the condition of the field. Cutting and carrying to the binding mechanism is positive. The butt adjuster has a wide range of adjustment. The reliable knotter assures binding every bundle. Bundle loaders may be had for both types of binders.

Enclosed-Gear Ensilage Cutter

The improved McCormick-Deering No. 12 Ensilage Cutter has a capacity of 10 to 16 tons per hour. It is the enclosed-gear machine with the one-piece, bridge-type main frame that encloses the flywheel, cutter, transmission, and apron drive. Another feature is the use of slip clutches on the paddle roll, feeding roll, and apron drive, which prevent overfeeding and damage to the machine.

All working parts are in an oil-tight, dust-proof housing and run in a bath of oil. Gears are especially cut and heat-treated. To vary the length of cut on the No. 12 merely shift a lever outside the housing. A selective-gear type of transmission, similar to that in an automobile, controls the speed of the feed table. The large, reinforced boiler plate flywheel with eight steel wings is safe at all working speeds. Other McCormick-Deering Ensilage Cutters are available in capacities ranging from 3 to 25 tons per hour.



INTERNATIONAL HARVESTER COMPANY

OF AMERICA
 605 So. Michigan Ave. (Incorporated) Chicago, Illinois
 Branches at Pittsburgh, Harrisburg, Philadelphia, Pa.;
 and at 45 other points in the United States.

McCormick-Deering Corn-Harvest Equipment

is ready also to handle your crop by other methods. See our modern Huskers and Shredders, made in 4, 6, 8, and 10-roll sizes. To pick the corn in the field, ask the dealer about the McCormick-Deering Corn Pickers — made in One-Row Tank type and Farmall One and Two-Row Pickers, picking and husking up to 16 acres a day. Write for catalog on any of these machines.

PURE-BRED RAM SALE

Indiana, Pa., Fair Grounds,
 Wednesday, August 27, 1930 - - at 1:00 P. M.

28 Head of Hampshire, Shropshire & Southdown Rams
 (selected by a committee for this sale)
 Also 8 Head of Hampshire Ewes

INDIANA COUNTY SHEEP AND WOOL GROWERS ASSOCIATION
 INDIANA, PA.

- LIME - ALBA MARL - LIME -

QUICK ACTING
 ALL AVAILABLE
 FINE AS FLOUR
 LOW COST

ALBA MARL

"Natural Soil Sweetener"
 GRANULATED
 FOR EASY SOWING
 WILL NOT BURN

WRITE FOR GUARANTEED DELIVERED PRICES TO -
 ALBA MARL LIME COMPANY, CHARLES TOWN, W. VA.

HOLSTEIN'S

for
PROFIT

EVERYWHERE

Write for the facts
 The Extension Service
 HOLSTEIN-FRIESIAN
 Association of America

350 COWS 350

T. B. and Blood Tested

Two Hundred Holsteins and One Hundred Shropshire Rams for sale by the Wisconsin Dairy Cattle Market. Also 350 head of Wisconsin Dairy Cattle. Write for facts to the Wisconsin Dairy Cattle Market, Trevel, Wis., on the line 15 miles S. W. of Milwaukee, 50 miles N. W. of Chicago.

Please Mention Pennsylvania Farmer When Writing to Advertisers

interior

In Tucker County, West Virginia

By W. D. ZINN

A FRIEND once said to me: "If you ever get within fifty miles of my place stop." I told him if I ever got that near his home I was coming on to see his farm and family. I want to say to my tourist friends if they ever get to Parsons, W. Va., to drive down to Holly Meadows and see the prettiest little valley to be seen almost in the state.

On the 25th a field day was held by the extension people of the West Virginia University. Messrs. Sherwood, Crane and Friant of that institution were present and visited several potato fields, made observations and gave valuable information to the farmers. These field meetings ought to be very helpful to potato growers. The pity about the matter is that more growers do not avail themselves of the opportunity of getting this information. This is a day of specialties and it is only the farmers who practice the best methods that can hope to succeed.

The ladies' club of that community had prepared a picnic dinner which all enjoyed very much. There will certainly be a better market for poultry in this community for some time to come. My contention is the supply governs prices largely and the supply here will not be so great until more chickens are raised.

The potato crop in this valley will be light owing to the very severe drouth, but the farmers will go on in the even tenor of their way and continue to grow potatoes, which they should do. The soil is ideal for this crop and potatoes should be made one of the money crops of the farmers in this valley.

According to present plans this valley will be inundated some time in the future, but one farmer told me he did not believe in crossing the bridge until he came to it. That is very good policy to pursue. Many of these good farmers may have passed on before the proposed dam floods this beauty spot of West Virginia, and why should they worry about it?

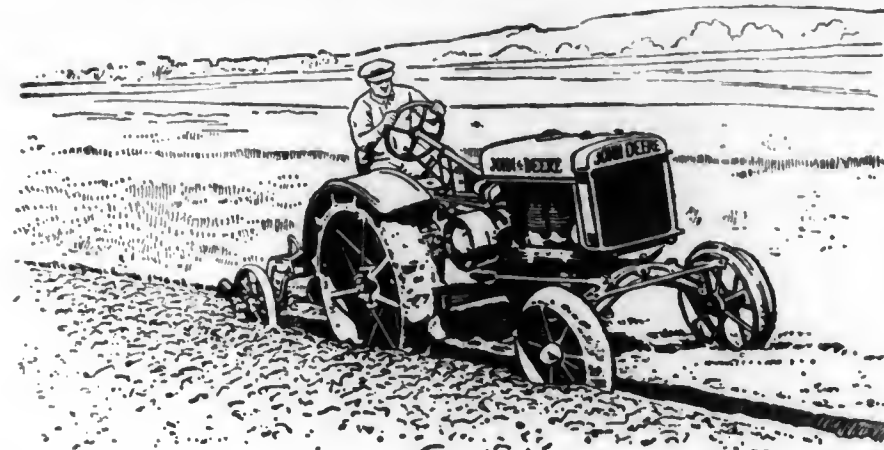
A Visit to Randolph County

In the year 1868 a colony of Swiss settled on the Buckhannon river in Randolph county and began to clear away the forest and build homes and open up farms. They were a set of sturdy, honest, industrious people who were determined to succeed, and they did. They established a village which they called Helvetia. They brought with them from Switzerland that idea of cooperation, organization and helpfulness for which their fatherland is so noted. They are located more than fifty miles from Elkins, the county seat, and yet often half the people who attend the Farm Bureau and other farm meetings come from this community. They constitute half the membership of the Farm Bureau of the county.

Another thing they brought from their home land was the idea that whatever was worth doing was worth doing well. They are good farmers and they succeed because they have learned habits of economy and thrift.

They have been very kind to the writer and have invited him time and again to their meetings. It was my great pleasure to visit and talk awhile to them on the 2nd and I never spoke to a more attentive crowd.

Not only do the men believe in organization and cooperation but the women also. This picnic was got up by three women's clubs and the long well-loaded table which they spread attested the fact that though the season has been very dry they have been able to grow an abundance of garden vegetables, and fat sheep and chickens are still to be found in this section. It was a real pleasure to mingle with these good people again and partake of the unbounded hospitality.



Plowing Advantages You Get

With the

John Deere General Purpose Tractor

Plowing is one of your important farm jobs—you want to do it right and do it easily.

The John Deere General Purpose pulls a two-bottom plow with a straight center hitch—there is no side draft to affect the work of the plow or the tractor.

Two wheels of the tractor run in the furrow. No need of steering the tractor every minute—it's practically self-guiding.

Then think of the many other uses you will have for this General Purpose Tractor—haymaking, harvesting, threshing, manure spreading, corn picking, silo filling, feed grinding, etc.—it will handle all of these jobs equally well.

When spring comes around you can get the planting and cultivating equipment for your tractor that handles three rows at a time.

You can do all of your farm work throughout the year with less help, with practically no horses and with less cost than you ever thought possible.

With a John Deere General Purpose on your farm now, you will start a cost-reducing program that is sure to materially increase your profits from your farm.

Talk to your John Deere dealer about the John Deere General Purpose that offers you money-making advantages found in no other tractor.

Get This Free Booklet

"From the Other Side of the Fence"

It's chockful of unbiased letters from General Purpose users telling of their accomplishments with this equipment—interesting and valuable to you. Write John Deere, Moline, Ill., and ask for booklet IL-436

JOHN DEERE
THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

FARQUHAR POTATO DIGGERS

For Large and Small Growers—

The Farquhar Elevator Digger contains every modern device for rapid, clean digging. Puts the potatoes in a neat compact row, ready for easiest and quickest handling. They have been proven right by the hardest kind of field operation.

The Farquhar is the original rigid tongue digger—can be backed, held over the row when digging on hillside—and is light of draft. Built with broad front roller or two wheel front truck. May be equipped with level or hillside cleats; also road rim.

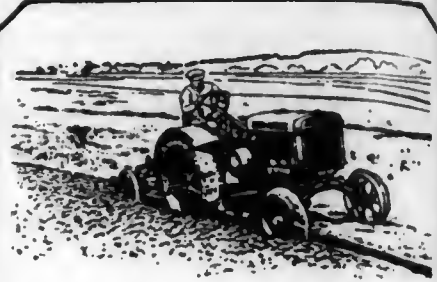
We also build the "Success Junior," the plow type digger for the smaller grower—the farmer's choice. Illustrated Catalog, describing both types of diggers, sent to any grower.



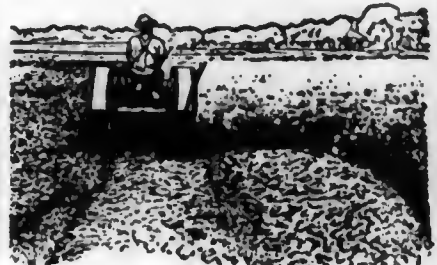
The "Success Junior" for the small grower.

A. B. FARQUHAR CO., LIMITED

Largest Manufacturers of Agricultural Machinery in the East
Box 246, YORK, PENNSYLVANIA



Pulls a two-bottom plow with two tractor wheels in the furrow and a center hitch to plow and tractor—an ideal tractor for plowing.



With the power-driven mower, 25 to 35 acres can be cut a day. The General Purpose handles all mowing jobs.



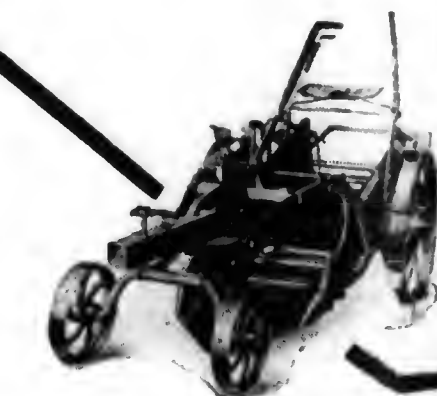
The light weight of the General Purpose is desirable on the disk and harrow jobs.



Grinding feed, threshing, filling silos—are a few of the belt jobs it will handle.



This is the John Deere Model D, the famous 3-4 plow tractor for the heavier farm jobs—simple, dependable, economical.



The FARQUHAR LINE:

Grain Drills
Harrow-rollers
Lime Sowers
Distributors
Cultivators
Shovel Plows
Weeders
Sprayers
Corn Planters
Corn Shellers
"NON-WRAP" Manure Spreaders
Potato Planters
Potato Diggers
Transplanter
Thrashers
Hay Balers
Cider Presses
Engines
Rollers
Dairy Rollers
Sawmills
Traction Engines

Farquhar Pumps and Water Systems for Suburban and Country Homes.

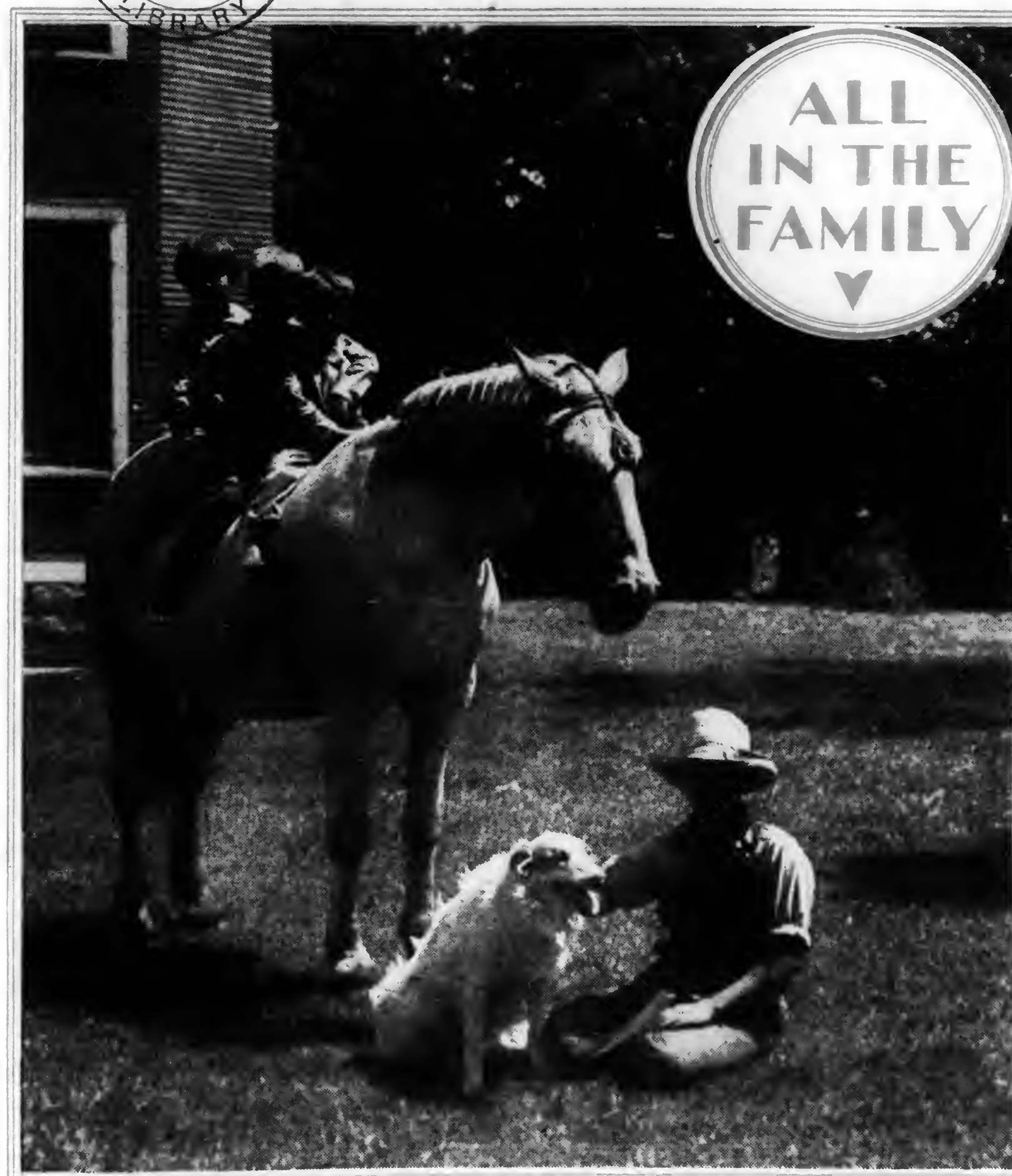
PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

August 30, 1930



Philadelphia

Pittsburgh

Harrisburg

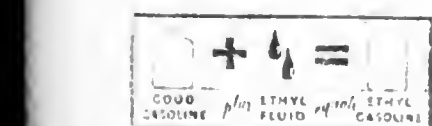
Farm Facts and Fancies

By ALVA AGEE

More acres to a
TANKFUL OF ETHYL

has been demonstrated in actual practice that more ground can be worked with less time and less cost when you have Ethyl in the tank of your tractor. You know the average time it takes you to work an acre, and the cost of labor, fuel, use of machinery, etc. Try Ethyl Gasoline, and you will get a record of the work accomplished, time required and cost. You will note a marked advantage in favor of Ethyl.

Read the engine's own language.



Ethyl Gasoline gives you added verve, flexibility, less gear-shifting, a smoother, cooler running motor. There is less vibration, and wear and tear. That's because Ethyl Gasoline is good gasoline with anti-knock fluid, the richest developed by automo-

tive research to improve the performance of gasoline motors of every kind and description.

Try Ethyl in your truck too and note its increased efficiency, the greater number of miles it will travel in a given time. And remember that an added saving is effected through keeping your equipment working right through the season without frequent lay-up for carbon removal.

Try Ethyl in your passenger car. It will run much better. More power, quicker response, smoother operation. It's easier and more enjoyable to drive with Ethyl. On sale in your locality at pumps bearing the emblem shown below. Ethyl Gasoline Corporation, Chrysler Building, New York City.



ETHYL GASOLINE

THERE is some queer reasoning in economic circles just now. The loss to the corn crop from drought and heat is far more than the wheat surplus in this country. Not only that, but the loss of hay, fodder and pastures is immense. The substitution of all our surplus wheat for corn in livestock feeding would still leave us very short of the usual amount of feeding stuff. Some see a great good in this crop failure in that the way is open to clean up all surplus at a high price for corn and a far better price for wheat than was foreseen a few weeks ago. They would have us look on the result of the bad season as a blessing.

No permanent good can come out of a condition in which thousands are sent near bankruptcy and a far greater number are hard hit, even though some others who suffered much less from the drought may get prices that will make the year prosperous for them. Any cleaning up of the surplus for this one year, and any increase in income for those who suffered little from the drought, do not balance for a minute the distress in all the drought-stricken region.

More than this, the cut in yields made by the weather does not strike at the root of overproduction, and in a single year we can have a surplus to face. If the crops of all farms had been cut evenly, the corresponding higher prices would have been a temporary good. As it is, the evil greatly over-balances the apparent good.

Too Much Merging

The farmers formerly were the great conservative element standing against merging of business and the lessening of competition. Along with them was that part of the public that is actively concerned about the cost of living. Then, too, there were those who always are grounded in the belief that opportunity should be left wide open for every individual who wants to go his own way in making a living.

Pooping among farmers, much as I believe in it, has taken the edge off the opposition to industrial and transportation mergers. Lots of consumers are more concerned about high wages than prices of what they pay. The net result is that we are going headlong on the road that hampers and destroys competition. I mention this now and then because farmers should see how they have drifted in their thinking, and I am sure we are traveling too fast for safety.

Land-Bank Loans

A reader finds that he cannot obtain a loan from his land bank because funds for lending are not available. Some of the banks are not yet able to sell bonds on satisfactory terms. This is not due to any scarcity of money in this country. Discount rates are very low, and money piles up that cannot be placed at a good rate of interest.

The money that is loaned on farms is borrowed by the banks from the public through bond issues, and public confidence was disturbed by lack of careful banking methods in the management of a few of these institutions. They tied up their money in loans exceeding the later market price of some of the farms, and two or three of the banks did some other things. The situation is clearing up right along.

I am mentioning this for two reasons. Our subscriber asks where he can find a dependable joint-stock bank to do business with. He should bear in mind that he is the borrower, and any bank that has the money and will lend it to him is absolutely dependable from his angle. He gets the money, and on terms regarding payment so fixed by law that all he has to do is to pay his interest and a small sum each year on the principal, and that is all of that.

Again, the public is coming to know that the most of these banks have made a record of carefulness that justifies investment in their bonds, and with money now so cheap one wonders that the lack of funds to meet all legitimate demand should continue so long. It does continue in some instances so far as placing bonds at a low rate is concerned. Thousands of our readers doubtless should be putting their debt into the form of a land-bank mortgage, reducing burden and strain, and there is at present a vast sum of money seeking safe investment at a low rate of interest.

Up a Tree

There is a pepper tree standing near the street I use in going down town. In that tree a boy has been living for several weeks. I stopped the other day to see whether I could learn why a boy becomes a tree-sitter. His mother who lives a block away was there, and so was his "manager" who sleeps on a pallet on the ground.

The boy said he was out for the record as a tree-sitter, and when I asked how about school later on the mother suggested that it might be possible to arrange for study that would satisfy the school authorities. The puzzling matter to me was what it was all about until she told me that he would probably have a "pretty fat" bank account if he won and present plans for reaping the rewards that go to winners of endurance tests do not miscarry.

I think the difference in our ages kept me from understanding fully, but if the road to a bank account were up a tree I reckon some gray-haired folks might begin to climb even if they could not understand why it was there.

Friendly Talks

By Edgar L. Vincent

"EXALT" your profession.

We hear that said a great many times, and usually in regard to preaching or teaching or some one of the so-called learned professions; but when have we ever known of its being applied to the business of farming? And yet, until a man does hold his work as a farmer high above every other calling, he is not apt to make much of a success of it.

"Exalt your profession." We know well enough what that means when it is said of the man of the Gospel. Lift it up high. Love it. Think more highly of it than you do of anything else in the world. I heard a young man say once: "I do not remember a time when I did not want to do this work. From a boy up I have felt as if I would die if I did not find a place here and fill it to the best of my ability."

Not long ago a queer sort of census was taken in one of the states of the West. So many men had failed as farmers in that locality that the folks down at Washington wondered what was wrong out there. And on making an investigation it was found that a great many of the men who did not make good on the farms were people who had come from the city. Many of these folks no doubt were good people at heart, but they did not love the farm with all their might, mind and strength.

When we set ourselves about our farm work so earnestly, so wholeheartedly, so passionately that every furrow we plow, every seed we sow, every tree we set out will be done as if our very souls were in it, then we shall hear less about farm failures. And there is this other great truth about it. If we exalt the farm, the farm will exalt us.

Fish-Ducks and Pelicans

By E. S. BAYARD

A LAW of Peru interests all smokers. A day or two before we landed at Callao notices were posted on the ship warning everybody against the use of any except llama matches in Peru. The match business is a monopoly there and only the approved or llama brand may be used legally. This law may not be evaded by the use of lighters, for each lighter must be licensed and the license costs about \$2.70 per month. Some matches were found in the baggage of a Y. M. C. A. worker who left our ship at Callao and he told us later in the day that this breach of law cost him the equivalent of \$20.

The harbors on this west coast of South America are not harbors as we know them. The Andes Mountains constitute the shore line nearly all the way and a steep and rugged line it is, without bays, inlets or river mouths that make such snug harbors on our own Atlantic coast. A few good harbors are said to exist in Southern Chile but they are of little use because no cities are there and little shipping is done. On this coast the ships anchor out in a bay more or less protected but never wholly protected. In a heavy swell nothing can be done, but fortunately there are fewer storms on the Pacific than on the Atlantic.

A Storm-Swept Harbor

A heavy swell, the effects of a storm somewhere, was on when we got to Mollendo, our last Peruvian port. I went back and watched the crew attach the line to the big stern buoy, which holds the ship at that end while the anchor is off the bow. They had some hard work before they made her fast and some more before they got their boat back on its davits.

We could see the mighty waves roll in and break on the shore, sending the spray far above the house-tops, 75 feet or more we estimated. We could see also quite a crowd awaiting the landing of mail and passengers, but neither could be landed, nor could any boat from the town reach the ship. After waiting for some time for the surf to subside our ship departed, to land its mail, freight and passengers somewhere else.

At Arica, the first Chilean port, we had the same experience. A reception to our party had been planned, refreshments had been provided, everything was ready to give us the first of many wonderful entertainments. Even a caravan of one hundred llamas, in from the mountains of Bolivia, had been detained so that we could see it. But the surf was too high. Nobody could go ashore and nobody could reach our ship, anchored out in the bay.

Island Covered with Birds

A launch containing the harbor master, the port physician and three members of the reception committee was started out to the ship, but it capsized and the doctor was rescued with much difficulty. The refreshments went to a home for orphans, at least the solids did. One man told me later, at Tocopilla, that the orphans did not consider the storm a serious calamity, a statement that might be called reasonably conservative.

Just off the promontory adjacent to Arica is a small island—we judged its area to be two or three acres but it may be larger. When the wind blew from this island to the ship it bore the strong odor of guano. It was actually covered with birds. I wanted to take an umbrella and go out and stir them up but this was impossible. I watched the morning seaward flight of birds from this little island. For thirty minutes or more they flew out in a steady stream, thousands of them—cuervos, or ducks which feed on fish and spend their nights in social

gatherings on the island. When the ship went out this great flock of ducks took flight, and for mile after mile a regular torrent of ducks, about 100 feet wide and 50 feet deep, flowed past our ship and across our bow. There were thousands and hundreds of thousands of them, apparently flying under some sort of leadership, for they maintained about the same breadth and depth of formation all the time, with practically no stragglers.

From Fish Life to Fertilizer

The cuervo duck is not good for anything except the manufacture of guano, we were told; but in the interior there are some fine wild ducks which resemble our canvasbacks. Mr. Pena, our able guide in Chile, was formerly an officer in the Chilean navy. He told me that the flock of ducks we saw was a comparatively small one—that he had seen much larger flocks. He said that on one occasion, when he was in command of a flotilla of destroyers, the flight across his little fleet was so great and so dense that he was compelled to stop the engines and drift, for it was dangerous to keep any one on the bridge or on deck.

I have seen myriads of wild ducks in Northern Canada in late summer and early fall, and on Currutuck Sound in North Carolina in winter; but I have never seen anything approaching this Chilean flock which Mr. Pena calls a small one. This cuervo or guanaye, the duck which produces most of the guano of Peru and Chile, is said to be the most valuable bird in the world. For it converts the abundant fish life of the Humboldt current into fertilizer. This duck weighs four to four and one-half pounds. It is a rather handsome bird, with light breast and brownish back. Several hit our boat one dark night but I did not find it out in time to see them. The flock on one island was estimated at over five million birds, this by measuring the island and counting the number on a given area. I have no idea how many ducks were in the flock we saw—it looked like several millions to me.

Menace to Airplanes

Birds are a real menace to aviators along this coast. The pilot of a mail plane rounded a point near Arica, flying low over the water, and ran into a flock of birds. They wrecked his propeller but he managed to make a landing.

I wanted to see that greatest of flying birds the condor of the Andes, but did not see any except in captivity. The condor is now protected by law but occasionally one is brought down in defiance of law. One was killed recently by a man of our own country who was not arrested but should have been. I was told that this bird weighed 49 pounds but its (Continued on page 13.)

Unadilla Silos are Serviced!

When you buy a Unadilla Silo that doesn't end the transaction. As a purchaser you are entitled to the attention of our service department—a year later or ten years afterwards. No other Silo manufacturer will take this interest in you.

Get the facts why a Unadilla is the best Silo buy today. Let us tell you how to fill your Unadilla and feed from it to get best results. Catalog and prices on request.

UNADILLA SILO CO., Inc.
Box P Unadilla, N. Y.



We Can Save You Money

Send for particulars about Compensation and Automobile Insurance. We protect the employer, 24 hours in the day in this Company.
PENNA. THRESHERMEN AND FARMERS' MUTUAL CASUALTY INSURANCE COMPANY
311 Mechanics Trust Building Harrisburg, Penna.

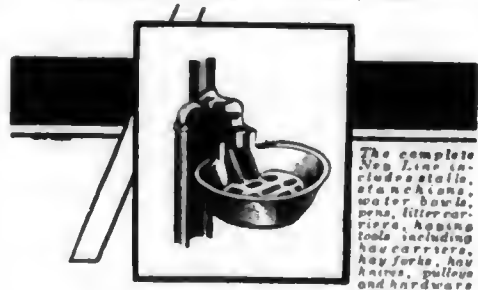
- LIME -
QUICK ACTING
ALL AVAILABLE
FINE AS FLOUR
LOW COST
WRITE FOR GUARANTEED DELIVERED PRICES TO -
ALBA MARL LIME COMPANY, CHARLES TOWN, W. VA.

- LIME -
"Natural Soil Sweetener"
GRANULATED
FOR EASY SOWING
WILL NOT BURN

Make Sure of Cow
Comfort and Make
More Money

THAT is the advice of W. B. Barr and Son, of Canton, Ohio. Mr. Barr knows from experience that the best way to increase milk production is to insure increased milk production, with a big saving on time and labor in caring for the herd. You'll be interested in reading Mr. Barr's story and eleven others equally interesting, are told in a booklet called "Cow Comfort". New Dairy Farm Equipment and Haying Tools are the result of 50 years' experience in working shoulder-to-shoulder with farmers and dairymen.

Send for a copy of Cow Comfort and the New Catalog No. 150.
THE NEY MANUFACTURING COMPANY
Established 1870 - Canton, Ohio



GOATS
The complete New Line in...
GOATS, Thoroughbreds, from world's best heavy milkers, Chiff, Giant Nubians, Toggenburgs, \$20.00 each, 2 for \$30.00.
Goldsbroughs Goats, Mohnton, Pa.

Buy now. Pay later.
A MONEY MAKER
Better feed—lower costs—more profits. Booklet "Users On Words" written by owner proves it. Write for free copy. Write your name and check box for items for illustrated folder.
The Ross Cutter & Silo Co., 191 Warder St., Springfield, O. Established 1850.

Save Your Corn Crop with
PHILADELPHIA SILO
Oldest, greatest, and best corn silo for keeping ensilage per 30-year record. Wonderful frame, special selected material. Costs more but you are better value.
Shipment in 24 hours from Norristown.
E. F. SCHLICHTER CO., Room 104, 10 S. 10th St., Phila.

350 COWS 35
T. B. and Blood Tested
Two Hundred Holstein and Guernsey Sprinklers sale. Can be seen any day in pastures near our 120 best Wisconsin cows in our pastures every day. Every cow T.B. and blood tested to go straight.
WISCONSIN DAIRY CATTLE MARK
Trevor, Wis.—On See Line
45 Miles S. W. of Milw., 58 miles N. W. Chi.

CRAWFORD COUNTY, PENN.
Has been clean for years
Several of our dairy men because of ill health are offering their entire dairies at bargain prices. Two of them are P. B. Holsteins, one best grade Holsteins blood-tested. Hundreds of points to select from, priced right.
Write us for details.
Crawford Co. Cooperative Dairy Improvement Sales Ass'n, Market House, Meadville, Pa.

DAIRY CATTLE
Holstein Bulls for sale, from an accredited silo for keeping ensilage per 30-year record. Can be seen any day in pastures near our 120 best Wisconsin cows in our pastures every day. Every cow T.B. and blood tested to go straight.
Reg. Guernsey Bulls—1 to 12 mos. old, \$5 to \$10.00. Langwater Royal, Cavalier and 13 acres. Hoffman Seed pays big.
A. M. Kennel, Honey Brook, Pa.

AYRESVILLE CATTLE of the best blood in the world. Accredited. Animals of both sexes all ages.
Geo. B. McConnell, Wellington, Ont.

Hoffman Seed Wheats Pay
Highest Quality in Years ~ Change Your Seed

At present prices you have a remarkable opportunity. Get more bushels per acre. Changing to new Hoffman Seed does it. 90% of all our Seed Wheat users say "changed seed." Order for your entire acreage—you can't lose. Positively can produce 5 to 15 bushels more per acre. No more expensive and requires less seed. One bushel more per acre will pay for new seed. Lancaster County Seed—hard, plump, vigorous, absolutely clean, no weeds, no weak seeds. Bags free. Special freight offer. Highest quality in years. Ask for new Wheat list and samples.

A. H. HOFFMAN, INC., Box 431
Landville, Lancaster County, Pa.

Hundreds of similar letters on file:

H. W. Taylor, Bucks Co., Pa.: "About 40 bu. per acre. New seed gives best results."
Martin Patterson, Salem Co., N. J.: "530 bushels from 13 acres. Hoffman Seed pays big."
Wm. Minkler, Dauphin Co., Pa.: "Increase of 15 bushels over ordinary seed."
Thos. J. Meyer, Berks County, Pa.: "Wheat from you last fall 35 bushels per acre—my own 24 1/2."
I. F. March, Montgomery Co., Pa.: "41 bushels 1928, 40 bushels 1929, at least 40 in 1930."
J. A. Plummer, Salem County, N. J.: "Have found it pays every time I buy new seed, 226 bushels from 5 acres."
John K. Brown, Orange County, New York: "35-40 bushels. I like to change yearly."
John Eby, Centre County, Pa.: "Your wheat 40% better in yield and straw."

NEW JERSEY'S extensive peach-growing industry is threatened by two diseases known as "yellows" and "little peach," which now are spreading through orchards at an increasing rate of speed, Prof. A. J. Farley, extension horticulturist for the Experiment Station, reports.

No complaint about spoiled wheat or rotten straw is heard this year. Farmers' big wheat crop was harvested in fine condition and the clean long-strawed wheat goes a long way in providing rough feed for only the straw stack taking out a few nibbles in the eyes of farmers, but "waste places" in some farms have proved of unexpected use. Both cattle and sheep have been able to find much nourishment in the coarse grasses of swamps which normally could not be reared for the mud and in wetter years are not palatable to livestock.

"O H, yes, you have," insisted Doody. "For those three chunky gents that were takin' it so easy in the middle of those three canoes that just passed up were United States deputy marshals goin' fishin', and if you had histed their canoes you'd have seen their fishin'-kits all iron, some made to shoot and some made to lock," and Doody clasped one hand round the wrist significantly.

Shain twisted round and stared at him, his forehead wrinkled with alarm and suspicion.

"Because I took to the bushes just now as a sign I'm afraid to meet 'em," Doody hastened to say, "but I ain't much of a man to get up talk with strangers, and United States marshals that are in a hurry to get somewhere should never be interfered with. I believe in obeying the law so far, anyway. Now for it!"

He dipped deep, and the canoe went on.

"These government officers are deefol easy to fool," said Doody that evening, setting his head comfortably against the shaggy bark of a hemlock.

"And I suppose that most of the people along the border think it's all right to fool the government?" suggested Shain.

"Don't you?" inquired Doody, squinting his eyes shrewdly as he asked the question.

"Well, it's right, there must be some little misunderstanding about it somewhere," retorted the young man. "When the government catches a man at it they usually put him in jail."

"When they catch him at it, I think you said there's a point, son," and Doody thrust forward his finger for emphasis. "There's a wholesale grocery concern down Passamaquoddy way that's got a store on the province side and another in Maine. And each store has a part of it built out over the water on piling. And when the nights are dark and inspectors are abed, boats slide across from one store to the other, and trap-doors are hoisted and pulleys creak, and goods go into stock without any custom-house getting stirred up with business. Now the men who own these stores are leadin' citizens and drive nice teams, and they ain't called anything except business men. I don't know what they might be called, of course, if some one should catch 'em at it, but those trap-doors have been oiled up for a good many years."

"Farther up the border there are plenty of big barns that straddle the line, and if the gov'mint knows that comes into one end and goes out of the other, that is raised on the farm one side of the line, and that is raised on the other, that's more'n the farm do, for of all the mix-ups in crops that a fellow can hear of, there are some of the worst in those big barns." He chuckled with deep significance. "And more'n that, other folks' crops come to those barns to get mixed, too. And no one seems any the worse for it!"

"Farther up the border there are plenty of big barns that straddle the line, and if the gov'mint knows that comes into one end and goes out of the other, that is raised on the farm one side of the line, and that is raised on the other, that's more'n the farm do, for of all the mix-ups in crops that a fellow can hear of, there are some of the worst in those big barns." He chuckled with deep significance. "And more'n that, other folks' crops come to those barns to get mixed, too. And no one seems any the worse for it!"

The next day the old man paraded the same tale of his discourse. All his stories, whether true or false, celebrated the discredit of custom deputies. He related with great glee how a man whom he was used to smuggle nutmegs in barrels.

"Well, I've seen that man," he said, "stuff a flour-bag just as full of nutmegs as he could, head it up, and lay it over on its side. Then he would kick it back and forth across the room, feeding it through the bung-hole till it was so full that there wouldn't be a rattle. Then he'd dust four round the cracks of the barrel, and load it up in his wagon along with real barrels of flour. When he was coming back into the country in bond, there were never an inspector on the line that would have been a stupid young man indeed who did not understand the trend of all these anecdotes and the persistent detraction of the customs officers." And Doody was trying Shain.

After showing how easy it was to fool the officials, the old man proceeded to exploit the profits. He said that a man who owned a pair of horses and a bigger wagon could make money "hand over fist" by simply carting potatoes and grain and various crops along short stretches of woods roads, it being necessary, of course, to cross the line at some point of the migration.

But this was easy, so Doody explained. There were places where the highways were devious, and although a man might be headed in one direction, it would be very easy for him to whirl and be innocently speeding elsewhere in case a deputy appeared. And the reason for his sudden alteration of his course could be made extremely plausible thanks to the devious roads.

Men also brought in horses had a smug business of it, and going to this wily tempter. Horses were lighter on foot than a load of potatoes, and once over the line, a herd of them could be readily divided and hidden. Cattle the same.

This sort of smugglers did well, too, he asserted, or, at least, used to before the Yankees made laws prohibiting the sale of liquors and then obeyed those laws.

But now the man who smuggled the contraband whiskey was obliged to ride far and wide and sell it, and to do that he must needs have a fast horse and a good wagon, and if he was caught, the gov-

The Skokums of the Allegash

By Holman F. Day

Copyright, 1927, by H. F. Day, Boston, Mass.

SYNOPSIS

The Mayor of Toban Jaws is the title, given in fun by the rough drivers who direct the stream of logs down the river, to the "runt" of the gang who is left alone all season to watch a ledge and prevent logs piling up there and causing a jam. This job falls to young Shain Searway on his first trip with the river men. At first very homesick he learns to like the river and enjoys occasional visitors who use it as a thoroughfare. One of these is Lud Doody, a man who shows a rod to find treasure with and induces Shain to accompany him in search of a fortune. Leaving Doody's former partner, much against his will, to guard the Jaws and prevent a log jam young Searway prepares for his great adventure. After some traveling by canoe they stop at a settlement where they are met by several suspicious-looking characters who seem to know Doody.

ernment took his entire outfit and sold it at auction, and that made such smuggling expensive. Doody furthermore admitted that a man who brought in liquor stirred up informers all about him, and was pretty sure to be caught.

It was only after many such conversations and after letting the seed ripen in the young man's mind that he came to the nub of all his discourse. "There are men," he said, "there are men, I say, there are men, I say, that have the snuggest little business there is on the border. No tug and lift and boss-teaming! Small packages and quick returns. Do you have any idea how big a bundle of opium is that you can make a hundred dollars on?" he demanded.

They were paddling at the time. Doody rested his paddle across the canoe in front of him and set his palms parallel.

"Only as big as that," he said, as the young man twisted his head round to look. "Into your pocket or into your valise, and plenty of people in the city anxious and waiting for you to get along with it. And the same way with other drugs. Market always up, and no questions asked. Two good men in a canoe, one of 'em with a nose that can smell deputies a mile away,—and there's your combination ready to make money!"

Now Shain Searway was a normal young man, with a full amount of moral nature about his make-up. But his human nature was stronger just then.

He was bound into a country that he did not know, with only a river-driver's usual board of a few coins in his pouch. For his food and transportation he was dependent on this man, who had rescued him from a place where he had been abandoned like a dog. The inevitable freemasonry of the woods had been established between them. They had broken bread together under the big trees, had slept together under the stars, and hour after hour during many days had swung in unison at the paddle.

It would be pretty hard, he thought, to play the incorruptible person of the story-books under the conditions in which he found himself placed. Human nature suggested that here was a man who had been good to him, and who was offering him a chance to make some money. This money must be made by smuggling, to be sure, but the education of Shain had not caused him to look on deception of the customs authorities as anything heinous. Nearly all the people that went down into the provinces to visit their old homes—even his own mother—had brought back various articles deftly concealed about their persons or in their trunks, and had displayed them with pride, and had laughed about their skill in getting these things across the line.

THEREFORE Shain paddled on and listened without rebuke, and at last, when they had left the Allegash and were swinging between the domed hills of the St. John valley, the king's dominions on the left, where certain goods were cheap, the territory of Uncle Sam on the right, where the same goods were costly, he sighed within himself, and then said, "Yes," when Doody put his important question:

"Well, son, what say? Are you going in with me?"

Their first stop on the St. John waters was at Ubal Cyr's, the low, broad, weather-beaten structure that served Castonia settlement for a tavern. Its threshold was scarred deep with the calks of river-men's shoes, and the floor in the main room was similarly honeycombed.

Two or three men were ranged on the dirt banking of the house, and Doody swung his dunnage bag from his shoulder and lounged down with them, waiting for Shain, who had stopped to hide their paddles under the overturned canoe, dripping on the shingle of the little beach.

Just as the young man came up, Doody was saying:

"He must have gone Seven Island way, for we didn't meet him."

"You hadn't seen any one from this way, then?" inquired one of the men.

"Not a person on the river, so far as we're knowin' to," replied the old man, with decision. "We might have been busy talkin', and so missed 'em," he added, with grim humor, for all these river-men appreciated what it means to meet others along the narrow waterway of the Allegash wilderness.

"There were only three canoes, with three men in each one, and three of the men deputy marshals," said the man, with equal display of humor. "So of course you might have missed 'em easy been lookin' at the styles of plug hats on the shore, or wavin' salutes to the ladies, or something like that."

"Deputy marshals?" echoed Doody. "And Clair Salter supposed to be ahead of 'em? What's up?" He stared from one to the other with wide-eyed and ingenuous surprise.

"Well," drawled the man, "the other end of the case is in bed in Ubal's place, here." He jerked his thumb over his shoulder.

Despite his apparent attempt to preserve his countenance of merely bland interest, Doody sat forward, twitching at his beard.

"In bed?" he cried. "Ain't he killed?"

"Who said anything about a man being killed or even hurt?" returned the other, his eyes twinkling shrewdly. "Cause a man's in bed, it ain't no sign he's hurt, is it?"

"I'll guarantee," broke in another man, "that you've seen Clair Salter up-river, and that you're knowin' to the fact that he shot Deputy John Flanders. Now what did Clair say, Lud? Didn't he tell you that he'd shot John, and killed him and wasn't he travelin' as though Old Nick had hooted him? We ain't deputy marshals! We don't ask you to tell us where you saw him or where he's gone. We'd just like to know if you didn't see him."

BUT Doody's face was immobile once more. "You are talkin' to me," he growled, "as though the Allegash region was only as big as a pin duster and I'd been settin' on the edge of it the last week whittlin' and watchin' passers! I ain't seen Clair Salter, I tell you."

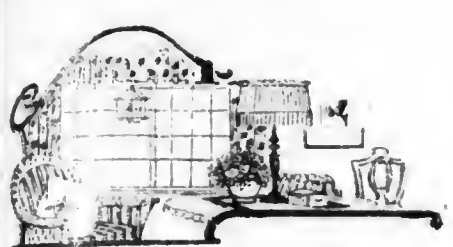
"I think you're lyin', Lud," rejoined the other man, calmly, "but if that's your tack, then take it. I never was much of a pryer myself. But if you don't know, then I'll simply say that Clair sat up here at Ubal's and patronized his own gin stock pretty liberally, and then sat there in the main room and went to braggin' how much money he'd made so far this season, and what he had in his inside pocket right then, and in a wooden box in his canoe, that would make a custom-house man's eyes stick out."

"Now it so happened that Fighting John Flanders, who had been up the night before, watchin' the Temiscouata road, was taking a nap in Ubal's back room, and I reckon that Clair's loud talk got sort of mixed in with his dreams, or something of the sort. 'Cause anyway, all at once he came tearin' out of that room and made for Clair, and Clair grabbed for his gun, and I don't know what he was intendin' to do with it, but I do know that John grabbed the gun, and they went to wrestlin' catch-as-catch-can up and down the room."

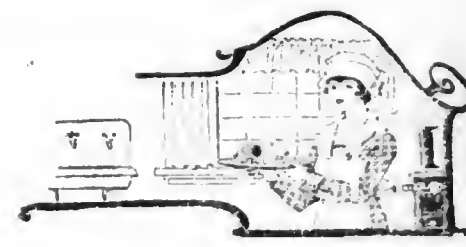
"The rest of us cleared out, for I've known guns handled like that to go off and hit some one besides a smuggler or a deputy inspector. That gun did go off all at once, and the next minute Clair Salter came right through that window there, sash and all, and he was howlin', 'I killed him, and I didn't go for to do it!' And into his canoe he went as fast as he could go, and we didn't stop him, for when a man has shot one chap, he's kind of runnin' amuck for the time, and just as likely as not is ready to shoot more if any one gets in his way. The last we heard of him he was turning the head cryin' like a calf and paddlin' like a lion."

"And he didn't kill him?" stammered Doody.

"Oh, John's got considerable lead in his leg, and he won't be feelin' like chasin' smugglers for some time, but the doctor who came up from Michoud says he'll be all right if he'll calm down and cool off and let it heal. Now you see, if Clair Salter only knew all that, why, then he could stop cryin' and paddlin', 'cause by the way he started, he acted as though he was tryin' to hustle right off the earth." (To be continued.)



The Farm Home



All the King's Horses

By R. D. BEACHLEY, M. D., Dr. P. H. and NELL C. WESTCOTT

Every day, over the radio, thousands of fans receive the good advice "Use your toothbrush twice a day; see your dentist twice a year." Yet, the only person out of four in these United States who does not use a toothbrush. Neglected teeth are like empty and nothing can "put them together."

The set of teeth need careful attention if they are to be followed by strong healthy second teeth. They will not only glorify the owner's smile but they are good health.

The school child and his slightly older brothers may very well visit the dentist four times a year. Those teeth which appear between five and six, the six-year molars, are a quartette. Parents who pride themselves on their efficiency as parents often receive a shock when suddenly it is discovered that the child has a huge cavity in the six-year molars.

These are permanent teeth and unless carefully guarded, often have to be sacrificed. And the person is six, sixteen or sixty, a pulled tooth is a most friend.

The child's baby teeth as though they are permanent. It means much in the afterlife of the child.

Both brushes are essential yet who has homes of refinement and been horrified by an array of unsanitary looking brushes in the store. Watch your own and renew them often. A dirty tooth brush is a poor economy. The toothbrush is a nesting place for germs that attack the teeth but the entire body and dental vigilance can cleanliness be obtained.

The child to think of his teeth as fingers. What of the state of his hand would he be using a knife, fork and spoon at the table? He poured all his breakfast into a deep dish and stirred it around with his hands, squeezed through his fingers and doing the same thing after day with each meal, never washing his hands. Sometimes a practical lesson that will drive home a lesson better than the preachments in the world.

The first-grader enters his class in September with perfect teeth. A good dentist removes a first tooth which is so tender it hinders the coming of the second tooth. The second tooth is neglected the second tooth may be infected.

Visits to the dentist in early life form a habit. They eliminate the fear of the dentist because they guarantee a minimum of discomfort in tooth treatment.

Discomfort throughout the country place oral hygiene means no longer necessitate neglect. "Use your tooth brush twice a day; see your dentist twice a year" and take the child to the dentist more often.

Prevent Seedlings from Damping Off

Seedlings are quite apt to damp off soon after they come up. To prevent this I plant them in a wet leaf mold and cover them with sand, according to their size. They do not grow so strong a root system this way, but I find it absolutely necessary with most plants.

Transplanted there is nearly as much trouble damping off. I have discovered that the best way to dig a hole in the dirt, quite large around for the size of the seedling, and fill the hole with fine sand after putting a layer of sand all over the top. Few stems will damp off this way and all grow faster in the leaf mold as the water in this soil will not injure roots.

Addie Folsom.

Cleaning heavy materials like khaki or canvas with hard soap over the hems and a needle will then penetrate the material easily.

Wearing any garment be sure it is clean and not conceal soiled spots.



STAND PROPERLY WHEN WORKING

In this picture are twenty-four suggestions to homemakers which are bound to increase not only the comfort and happiness of the good wife and mother, but bring added peace to the entire family group. If you cannot locate that many, write Home Department for a line of help. If you find more, write anyhow. We are always glad to hear from our readers. G. S. S.

Thought and Home Work Combined

THE housekeeper has what many workers have not, the chance to think, plan and work out her own problems while she does habitual tasks. "Learn to think; it will profit you; there is no little competition," is a valuable bit of advice, not only in money value but in all life values. While mindy economizes by capably managing her own home, certain that it is clean and well-ordered because she is doing it herself, her mind is free to think. It will occupy itself fully if she does not direct its action to conclusive thinking and helpful planning.

Four of the central activities of the home: washing, ironing, cleaning and mending, do not require great mental concentration after one has performed them habitually for a while. The result is that the mind of the home-maker is left to amuse itself. It may dwell on imagined wrongs, may linger over past pleasures or triumphs, may idly dream of what it would like to have, or it may exercise its highest capacity doing concrete, constructive, conclusive thinking. One difference between day-dreaming and clear thinking is that day-dreaming never gets any place, and thinking does.

Perhaps two courses of action present themselves to the homemaker. She considers them both at length, then lets them drop, deciding on neither. Conclusive thinking decides which way to go, closes the deal, creating at the same time an act of the will which launches one forth to action. So by thinking a woman may run her home more smoothly, coming to understand the deeper significance of her work as a homemaker. She may learn to live more graciously, may develop a finer family. She may imbue her home with a sweetness, a heart warming quality of understanding. Marlon Cossitt Brackin.

Timely Tips

KEEP a pile of white blotters in the sideboard drawer and when milk, cocoa or fruit juice is spilled on the table cloth blot it up as quickly as possible.

Where there are several children in the family put a row of hooks in the bathroom door and loops of different colors on the bath towels. Give each child his own towel and insist that it be kept on his hook. This precaution will go a long way toward preventing the head colds, eye troubles and sometimes skin diseases that seem to "go through families." L. M. Thornton.

The Jealous Child

By EDITH D. DINON

"M" little girl of six years is always blaming that happens that is wrong. I have seen her deliberately break her doll when she thought no one was looking and blame her little brother for doing it. Thus writes the mother who cannot understand the reason for such conduct on the part of her young daughter.

When we continually blame some particular person we are apt to have feelings of resentment toward that person; perhaps to be jealous of him. Is there any reason why the little girl should be jealous of her brother? One wonders whether she was adequately prepared for his coming.

This little girl was the only child for two years. She occupied the center of the stage not only for her own parents, but for relatives and visitors as well. Would it be surprising that if quite suddenly and unexpectedly she found her mother devoting practically all her time to a newcomer, she should feel resentful and unhappy?

Perhaps four years ago these ugly feelings began poisoning her mind. Perhaps they have grown up through much attention paid the baby at the expense of this older child. It may be that her behavior has brought criticism and scolding upon her, and the transferring of the blame to her brother is an attempt to raise herself in the eyes of the parents and bolster up her own self-esteem.

Probably she is being required to play too much with this younger brother. Children need playmates of their own age to challenge their powers and arouse their interests.

Such a case is not one for criticism but for study because the jealous child becomes the jealous adult. Such a person finds it hard to share in the joys and successes of others. She becomes an object of dislike and this makes her feel that she is unjustly treated and persecuted.

N. J. Col of Agriculture.

Keep Good Posture at All Tasks

GOOD posture throughout her active day is a matter of more importance to the homemaker than she may realize. It makes all the difference between weariness and freshness when her work is done. Faulty ways of standing and sitting cause much unnecessary fatigue, backache, tired feet and a general feeling of slump which must be quite out of proportion to the amount of work done. If bad posture becomes habitual the spine may be affected, the shoulders become "round," the ankles may have a tendency to "run over," or other defects may develop. Sometimes these are sufficiently serious to cause displacement or cramping of internal organs leading to many physical ailments.

It is fairly easy to catch oneself stooping unnecessarily over the sink, the kitchen table, the wash tubs, or ironing board. Sometimes a little adjustment in the height of these working surfaces is what is needed. Good sitting posture is often neglected because of a natural tendency to relax in a chair if one is already somewhat tired. Putting the feet squarely on the floor and sitting with the base of the spine well back, helps to throw other parts of the body into good sitting position.

Perhaps the least noticeable and most frequent tendency to slump the shoulders and chest and thrust the hips out of place occurs when one is doing work that requires continuous standing, sweeping or mopping, cooking at the stove, and so on. When one is making some dish which must be "stirred constantly" it is easy to forget about posture and allow the body to sag.

The illustration, taken by the U. S. Department of Agriculture in a Massachusetts farm kitchen, shows just how to stand properly when busy at the stove. The chest is high, the head erect and the back straight, the worker is standing squarely on both feet, which, incidentally, are clad in well-fitting, low-heeled shoes in good repair. The stove surface is at a good height for this homemaker.

Because bread molds quickly in hot weather it is well to scald bread boxes twice a week, dry them in the sun and keep them free from old crumbs.

Put raw vegetables to get the benefit of the vitamins and soluble minerals.

THE YOUNG PEOPLE

New Recipes for Tomatoes

WHEN you tire of sliced or stewed tomatoes, try these unusual tomato recipes:

Tomato Toast

MELT two tablespoons each of butter and flour in the double boiler, and add, stirring, one and one-half cups of stewed, seasoned and strained tomatoes to which a pinch of soda has just been added; then add, at last minute, half a cup of hot cream, salt and bit of sugar to taste, and pour over toasted and buttered bread.

Stuffed Tomatoes as a Meat Dish

PREPARE as above, and fill with minced cooked lamb, beef, or other meat, mixed with a few fine crumbs and moistened liberally with any nice sauce or gravy on hand, or the tomato (minced) which is removed. Broken mushrooms, cooked five minutes in butter and a spoonful or two of milk or cream, and sauce thickened, make a very delectable filling. In either case sprinkle with crumbs and dot with butter.

Rice Ragout

COOK one cup or less of rice in good strong stock in the double boiler (meat tablets may be used to make stock), adding bits of onion, tomato and sweet pepper. Season highly with pepper, salt, a half teaspoon of sugar and a half tablespoon of butter. Heap in the middle of a hot platter and garnish with broiled and seasoned halved tomatoes, or hard-boiled eggs in tomato sauce.

Curried Tomatoes

SAUTE thick slices of tomatoes dipped in flour mixed with salt, sugar and pepper. Remove to rounds of toast on a hot platter. Pour two cups of thin cream or top milk into the same frying pan, season to taste, thicken slightly, add curry in proportion liked. Pour around tomatoes, garnish with croustons and parsley, and serve all very hot.

Chippy Loses His Tail

ONE day last June my brother shot at a small chipmunk, or, as they are commonly called, a ground squirrel. It was about half grown. The bullet grazed the top of its skull, stunning the little animal. Taking pity on it Brother brought it home, dressed the wound and put it in a small box. We gave it water and nut meats and soon it would eat from our fingers.

In a few days we gave it the run of the house and one day baby sister caught it by the tail and pulled all the fur off. We were then forced to clip its tail. It did look funny with a short tail.

Chippy, as we called him, was very cunning. He would stand on his hind feet and beg for nut meats; would lap milk like a kitten and was very fond of cookies. If you gave him more than he wanted he carried them to one of the bed rooms and put them in a corner under a bureau.

Chippy would not bite when he was picked up unless he was mistreated, then he would bring his teeth into quick action, but never bit any one badly.

A laughable incident occurred one evening when a neighbor and family were spending the evening with us. Every one wanted to hold and pet Chippy. He became excited and ran down the inside of one of the boys' trouser legs. Oh! what a hilarious time! But Chippy made good his escape and hid under the sink.

One day when every one was very busy, Chippy was forgotten and the cellar door left open for a short time. We never saw him after that. It was



Here is a picture of our pet cat. The high chair is over fifty years old. My mother sat in it when she was a baby. Emma Whigam.

known he was in the cellar and we suppose he went outside and the cat probably put an end to his happy and active life. Eleanor Mellott, Pennsylvania.

WHEN SILENCE IS GOLDEN

It was a beautiful evening and Ole, who had gathered up courage to take Mary for a ride, was carried away by the magic of the night.

"Mary," he asked, "will you marry me?"

"Yes, Ole," she answered softly.

Ole lapsed into silence that at last became painful to his fiancé.

"Ole," she said, desperately, "why don't you say something?"

"Ay tank," Ole replied, "they bane too much said already!"

Darkest Hour Before Dawn

By Helen Kirkheart

BERT and Helen Conrad met brother Bill and me, Ruth Mason, at the railroad crossing near the small town of Southville, early one Sunday morning in August.

This was the day of all days! The weather was wonderful! Fall was beginning to appear, and yet the beautiful green days of summer held their spell of mystery over nature.

By the time the sun was showing its blushing face above the horizon, we were well on our way to a cave several miles east of Southville.

This cave bore a hint of mystery, since no one had seen Joe McPherson when one day, about a year ago, he entered the cave. The cave was searched but no trace was found of the missing man.

Our parents had forbidden us to go near, but as mystery hath charm to the young, we decided to go anyway, and many times since have we dearly repented not heeding our parents' warning.

We reached the cave by early afternoon, and at once started to explore it. We had brought a couple of flash lights, so as to be able to go far into the interior of the cave. We had gone about a mile when we came to a place where the cave divided. Bert and I started ahead through the main cavern, while the other two took the other trail.

We had gone quite a distance when we thought we heard screams. We listened, but heard nothing further, so went on. We kept getting on farther into the interior, when presently we found ourselves in a large room-like cavity.

In one corner was a heavy door and with our combined strength we managed to open it. We then, to our amazement, were in a fine, large and expensively furnished room.

Of course our curiosity was aroused! We began exploring. I was investigating the contents of the table drawers when Bert shouted:

"For heaven's sake, Ruth, come here!" I ran to him and made one

A Strange Custom

FROM time immemorial the people of Japan, especially the children, have kept singing insects in little wooden cages, as the people of the West keep birds. But once a year, in the early autumn, comes a day for all people to free their insects so that they may join wholeheartedly in the lyric outburst to the Seven Flowers of autumn. The famous old garden in Mokujiima, now damaged by the 'quake, has been the center of that observance in years gone by. The autumn flowers were in bloom, Japanese lanterns threw a mellow glow on the thick carefully tended foliage and upon the old pond with its fantastic bridge and lotus flowers, lighting the paths for the gayly clad throng clattering here and there on their wooden gata.

Nearly all of them carried little cages with several insects in each one. Those who did not have pets to free bought songsters from stalls set up at the entrance to the garden. The visitors gathered in groups near grass plots, formed circles and opened the doors of their cages, gently pushing out the insects. Then they listened eagerly for them to join in the joyous cry of freedom.

Writers on Japan from the time of Pierre Loti have described graphically the almost deafening sound of the cicadas in the late summer and early fall. The insects fill the air throughout Japan with their song.

What Is Your Hobby?

HERE is part of a letter from Mary V. Kundra which I want you to read:

"I think a good idea for a contest would be for everyone to write an interesting account of his 'hobbies.' Mine is picking up small shells. I have over fifty from real tiny pin-head size to more than an inch and a half in diameter. I keep them in a round fish bowl with moss covering the bottom. This I keep in constant moisture, therefore it is always a nice healthy green."

Everybody should have a hobby—postage stamps, flagpoles, pianos or something. What do you collect? An exchange of ideas along this line will be very interesting.

There will be ten fine prizes for the best letters published. Send your letter immediately to Young People's Editor, Pennsylvania Farmer, 7301 Penn Avenue, Pittsburgh, Pa.

Soliloquy of a Bean Picker

By Barbara Ellen Shoemaker

We planted our beans in a field with corn.

I like to pick beans when it isn't too warm.

One, two, three, four, five, six beans in the pan.

I'll plant beans in my corn field when I'm a man.

These beans feel so tender they'll grow good I know.

Oh, dear me, listen to that brazen old man!

I'll soon have enough, my pan's packed with the rim!

The sun is so bright; a fine day for swim.

I hear the bell ringing, this is the bean.

I hope lunch is ready, how hungry I am!

A Poet Steps In

By Leontine Primm

Our "Farmer" came to us today; Now I'm busy as can be. Looking through the Young Folks' Page All the new things to see.

The illustrated cover is a source of joy to me; It's a kind of background For the contents I'm to see.

I read the advertisements I scan the drawings fair. And if I don't know what to buy It always tells me there.

So I enjoy the Farmer From top to bottom and back. And as an all 'round magazine, There's nothing that it lacks.

Little Folks' Corner

The Housekeeping Adventures of Timmy Twitchet

By RUTH PLUMLY THOMPSON

TIMMY's house (Timmy lived in the old doll house in the garret, you know) grew more cozy every day. He was always finding things for it, and "findings are keepings," said Timmy scampering off to his garret each night with his treasures. He had a scalloped blanket for each bed in his house that he had cut from the needle book. Oh, there were elegant furnishings in the sewing baskets! The empty spools not only supplied him with firewood for the winter, but made excellent stools when sawed in half and upholstered.

Several unfinished and tiny sachets added the finishing touch to the drawing room sofa. "Where did you get those attractive pillows?" asked each visitor in delight. But Timmy just twirled his whiskers and said nothing, which, after all, is the best way to get around things. A white celluloid thimble answered beautifully for a bucket and some brown shoe buttons gave just the needed touch to his last year's overcoat.

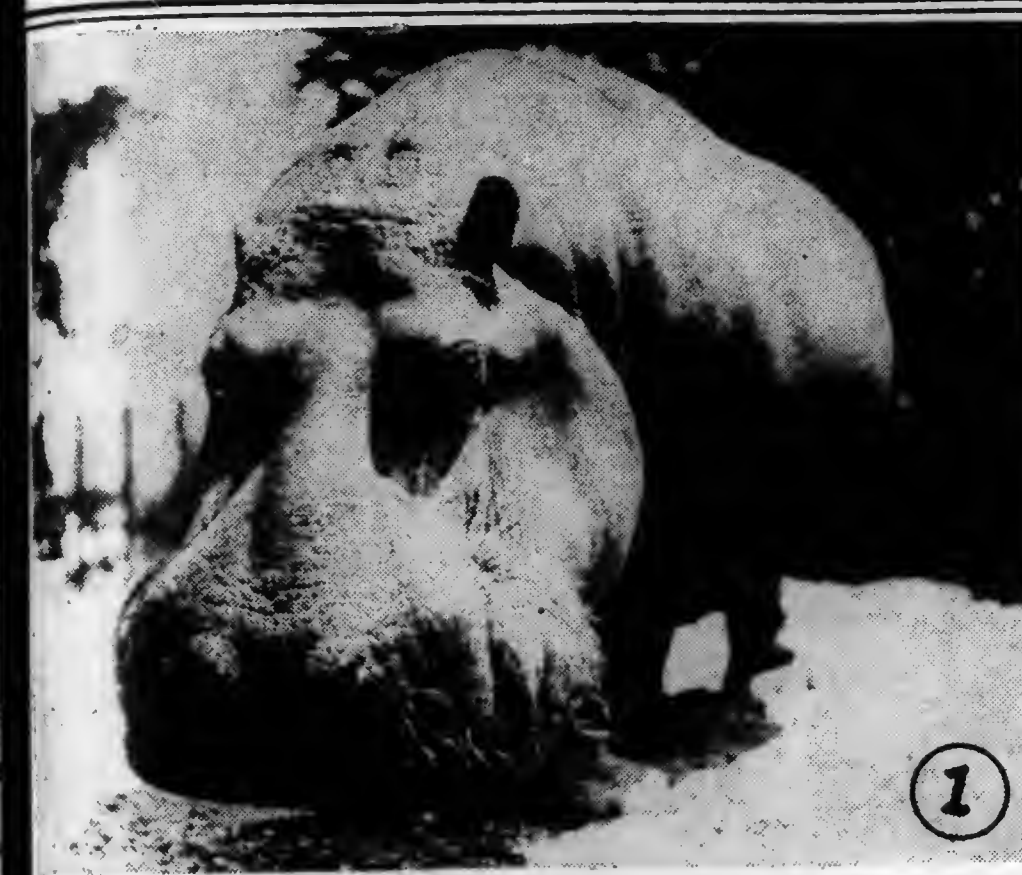
The furniture had been roughly treated by the dolls, but Timmy put it all in perfect order, and also promised himself the pleasure of painting

the house a little later on. In the bureau drawers were any number garments, which, unfortunately, Timmy no good, for they were property of the former tenants, the young ladies, and Timmy was a gentleman mouse. He tried on several of the hats and confessed to himself that it would be very cheering to see them on some demure little mouse lady—his wife, for instance. Of course Timmy had no wife, but he was always planning ahead, for "what use a charming house with no one to share it," he remarked to his friend Bobby Grey, who often spent the night with him.

So he hired an old mouse lady to come in and launder all the dresses and mend all the little lace petticoats for "that will be quite an item, quite an item," said Timmy Twitchet, stroking his chin thoughtfully.

All the visiting ladies seemed to think so, too, and Timmy had a number of chances had he cared to take them. But what I particularly wanted to tell you about was Timmy's latest find. All the other treasures were as nothing compared to it. (To be continued)

PASSING EVENTS IN PICTURES



1



2



3



4



5

1. Milwaukee, Wis. A futuristic shot of the face that only a mother hippo could love. This mild-mannered monster, Yacobi, weighs three tons, and was photographed before his daily bath at the Washington Park Zoo.

2. Los Angeles, Calif. Photo shows Caddy Mozart Johnson in the latest safety device for golf courses. It is designed somewhat like a giant mousetrap and protects caddies and ball-retrievers from wild golf balls.

3. New York. Col. Charles A. Lindbergh making his formal debut as a broadcaster in the studios of WABC where he talked for fifteen minutes over a world-wide look-up on "International Aviation."

4. Here is the heart of the time service supplied by the United States Naval Observatory at Washington. Paul Sollenberger, shown in the picture, is in charge of this intricate mechanism. The equipment is compared regularly with signals emanating from foreign observatories.

5. Brig. Gen. Ben H. Fuller, newly appointed Commandant of the United States Marine Corps.



All in the day's work with a **FORDSON**

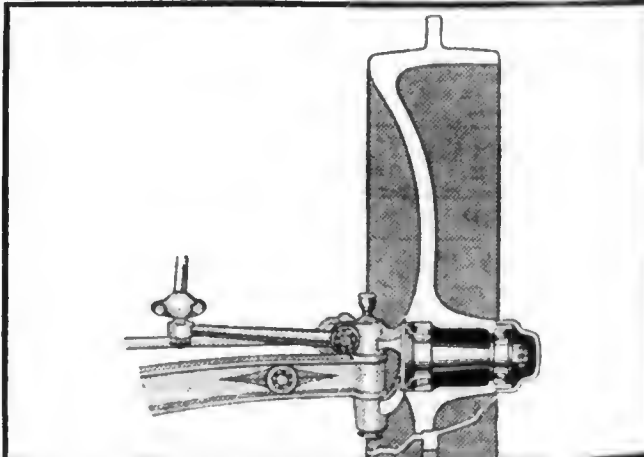
A MAN in Missouri is pleased with the way his improved Fordson turns heavy sod. A wheat farmer of North Dakota tells how his new Fordson helped cut 500 acres of grain this year in record time. Other Fordsons for other farmers are doing a dozen and one different jobs quickly, easily. The following new and modern features explain in part why the improved Fordson makes good at so many farm-power jobs.

The engine can deliver 30 actual horse-power at 1100 r.p.m. at the belt. This provides more than ample power for the pulling and belt-power jobs on the farm. The high-tension magneto with enclosed impulse-starter coupling makes starting easy. The improved Fordson is equipped with hot-spot manifold and carburetor for gasoline. The cooling-system water-pump is driven by a V-type fan belt. The air-washer holds enough water for the day's run.

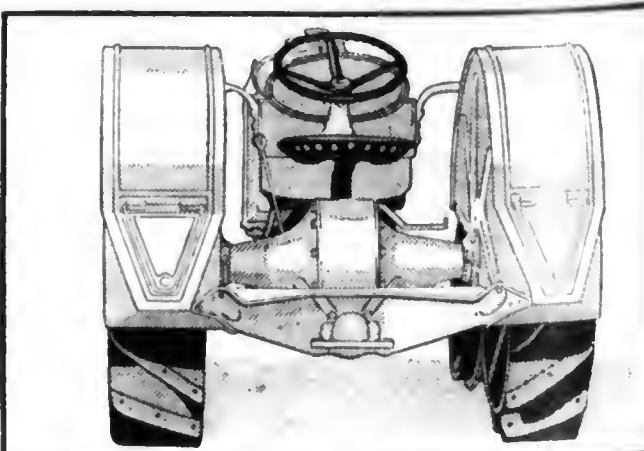
The filter that separates grit and carbon from the oil on the improved Fordson is easily cleaned—but should it get clogged, oil system will keep right on working. There is no complicated piping to get stopped up! Transmission is fitted with large roller bearings. The transmission brake is sixteen-plate multiple-disc with increased plate-surface.

Gears shift easily from increased clutch release movement. Rear-wheel fenders are standard equipment. Either spade-lugs or angle-cleats are available for drive wheels.

We said at the first that these features would partly explain why farmers like the improved Fordson Tractor. The only way to know *entirely* why they like the improved Fordson is to try one yourself. *Modernize your farm with a Fordson Tractor.*



Wheels are of strong, one-piece construction and mounted on roller bearings. Wheels are heavier than formerly. Front spindles, tie-rods, steering connecting-rods are all drop-forged from carbon steel. The front axle is drop-forged of carbon steel and heat-treated.



Fenders have been added to the improved Fordson to protect dirt from dirt, add weight and balance. These fenders are of heavy galvanized steel.

F O R D M O T O R C O M P A N Y

G. M. STULL CO., CHESTER, PA.

PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

September 6, 1930



Christiana Creek near the Pennsylvania-Delaware border. Here the American flag was first unfurled in war a few days before the battle of The Brandywine, September 1777.

Philadelphia

Pittsburgh

Harrisburg

Park and Pollard feeds

are good feeds because

Park & Pollard feeds

are profit-making

feeds.

Our dairy feeds contain best selected ingredients and scientific nutritional balance.

Dependable Feeds for Every Purpose

Poultry Feeds: Lay or Bust Dry Mash · Red Ribbon Scratch · Growing Feed · Intermediate Chick Feed · P & P Chick Scratch · P & P Chick Starter—Dairy Rations: Overall 21% · Milk-Maid 24% · Bet-R-Milk 20% · Heed Heih 16% · Milkade Calf Meal—Other Feeds: P & P Stock Feed · Bison Stock Feed · Go-Tu-It Pig and Hog Ration · Pigeon Feed · P & P Horse Feed · Pocahontas Table Corn Meal

Farm Facts and Fancies

By ALVA AGEE

THE effect of the introduction of new equipment for seeding and harvesting grain is obvious. So is the effect of displacing horses and mules with tractors in reducing the demand for feed while buying oil and gasoline. There is another effect of far-reaching consequence. When horses are used for power, the number on a farm is kept down to what is considered necessary in a normal season because it costs money to keep horses through the year. The introduction of mechanical power on most farms, in some form or other, means probably that on nine farms out of ten there is much more power available than would be the case if horses furnished it. The tractor could do more work than there is to do, and so all along the line.

More Efficient Work

The presence of this surplus power on farms makes farmers more independent in planning and doing their work. If the coming of spring is belated, the planting is belated, or skimpy preparation is given the ground, when the normal horse-power of the farm is limited. Later in the year some drouth or excess rainfall may again interrupt plans, and crop yields show the effect. When the farm has power to spare, work is speeded up and it is better done. All this seems obvious enough when one sets it down, and yet in accounting for overproduction of food crops in normal years we do not credit it sufficiently to this excess of power on farms that helps their owners to produce more stuff for market. It gets more work done and done on time.

The question is not whether it pays to invest in mechanical power to displace horses, or how many horses any certain farm should keep throughout the year to take care of times of stress. All that is something else. My only point is that the wide introduction of mechanical power increases the yielding capacity of farms of fixed size, and we are producing far more than would be the case if horse power were depended on, as was the case not so many years ago. It is too bad, but the more progressive a farmer is, the more he seems to get into his own way.

Plenty of Company

We think that agriculture gets hit going and coming in this country, and it is so, but that is the way at times with most industries. The railroads were gaining in earning power when the public provided itself with hard-surfaced roads and trucks and automobiles. The ownership of a road through some sections of the country became a liability, and roads began petitioning the Interstate Commerce Commission to let them abandon the investment.

A great sum of money had been invested in mills for the making of cotton goods, and along came the fashion for silk and the means for supplying the material. Twenty years ago the owners of great tracts of timber believed they had a monopoly that would pile up riches, and inventive genius devised a hundred ways of displacing wood with metal, and now the lumber interests spend money trying to educate the public to use more wood.

There is no end to the list of disappointments most industries have faced. There is no dangerous coal or oil monopoly since electricity has come into use, and there is practically nothing for which a substitute cannot come along when needed. It does us no good to believe that farming has the universe specially ranged against it. "Life is a battle," as Henry Van Dresher used to say, all along the line. The only man who really has

the last word in the contest is the undertaker. He fares pretty well.

In High Gear

Gang killings, hold-ups, and all that, are not evidence that people are growing worse. The trouble is that when new inventions started the whole country in high gear the opportunity of the vicious was increased. In slower days a blood-hound could get a criminal; now high-powered cars, machine guns and telephones make a five-minute start ahead of justice all the lead necessary for escape. The situation gives us big newspaper headlines while the most of us are going about our business in an orderly way. Americans like speed of all sorts, and will pay the price rather than give it up. Then the reasonable course is to maintain a monopoly of the crime committed, depriving others of a chance to share in it by deporting every foreigner who is convicted of crime here. That would help matters materially.

Speeding Up

There are ill-results from speeding up the machinery of life that do not get into any headlines and are largely ignored. They concern the great mass of people in a degree we do not easily realize. Possibly the best index of the effect on ourselves that the new order of things produces is found in today's restlessness. A minor item that may serve as an example is the one hundred and twenty-five millions of dollars invested within the year in midget golf. Yesterday we took a leisurely drive through a city and, Sunday though it was, men were hard at work putting in new courses on lots to meet the demand that has sprung up.

This is too small an item in our bill for entertainment even to mention except that for the moment it is novel enough to be noticed. I rather think that this new device for putting in one's time may be about the sanest among the newest amusements. It meets a desire for entertainment that a motor car provides for some others. My only point is that the demand for entertainment is boundless, and a little thinking on one's own and a little quiet must seem horribly humdrum to those trained to depend upon others to speed up existence for them.

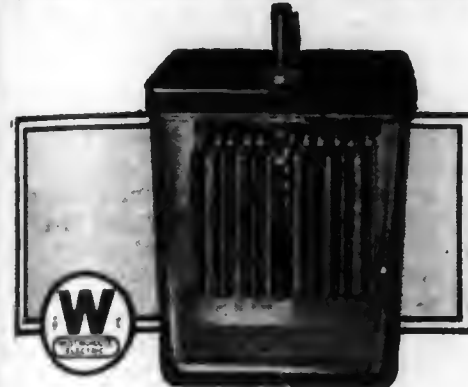
But it isn't the demand to be entertained that is the evil. That is only a symptom. Speed has got into our blood, and we are in a hurry. We do not want leisure because we would not know what to do with it. That is the biggest pity of all.

Lime for Acid Soil

FERTILIZER and lime pay, even on 80-cent wheat, Ohio tests indicate. C. G. Williams, director of the Ohio Experiment Station, advises using lime if the soil is acid, but claims that on most Ohio soils a little fertilizer in addition will yield a good profit even with wheat at 80 cents per bushel.

At the Ohio Station wheat has given a 15-year average yield per acre of 23.48 bushels on land which has received nothing but two tons of ground limestone every four years. This is considerably above the state average, but an application of 250 pounds per acre of a 4-24-4 fertilizer has increased the yield of wheat 16.63 bushels above the unfertilized yield as a 15-year average. This increase at 80 cents per bushel will pay for the fertilizer used on the wheat and leave a profit of over 75 per cent on the actual cost of the fertilizer—not to mention the benefit to the clover following. Under some conditions a 2-14-4 or a 4-12-4 fertilizer might be expected to give equally good results.

Announcing the new 10-year PLANTÉ BATTERY



They're here! A new line of moderately priced Westinghouse Planté Batteries with positive plates of pure lead almost $\frac{1}{2}$ inch thick. Westinghouse guarantees every one of these batteries, which can be used with any make of plant, to give 10 years of faithful, uninterrupted service when properly applied and cared for. Examine these batteries in the Westinghouse Exhibits at the Fairs.

Get prices and all the facts about this new development in farm light batteries, and learn more about the full line of Westinghouse Electric Service Plants and Water Systems. Mail the coupon today!

Westinghouse

Westinghouse Electric & Mfg. Company, Small Electric Plant Section, East Pittsburgh, Pa.
Please send me, without obligation, full information and prices on: () Planté Battery () Electric Service Plants () Water Systems.
Name.....
Town..... RFD No.....
County..... State..... P. F. 9-6-30

When writing advertisers please mention **Pennsylvania Farmer**.

IN OPERATION At All Principal Fairs

DELLINGER Hammer Type MILLS

PRICED AS LOW AS \$110.00 F.O.B. Lancaster
In sizes to Operate with 7½ to 40 H.P.
Furnished with or without Automatic Feed Rolls and Governor.

— ALSO — The No. 22 DELLINGER BATCH MIXER

For Mixing Ground Grain, Ground Roughage with or without Molasses for Dairy Feed.

ON DISPLAY Combination Mill, Feed Mill, Fodder Shredder, Concrete Mixers, Wood Saw and Tractor Saw Frames
A. M. Dellinger, Lancaster, Pa.

With the Bees

ON account of the drouth bees are not getting honey in sufficient quantities to store for winter and will need to be fed to go through the winter successfully. I have transferred quite a lot of bees this fall and do not find much honey in the hives, only one to five pounds. They should be fed a syrup made of granulated sugar.

One pint of sugar to make a quart of syrup will be about right for early feeding. For late feeding make it stronger. Mix with cold or luke-warm water. It does not need boiling.

You will need to be very careful when feeding that you do not get the bees started to robbing each other. They will be especially bad this fall. The plan I have adopted is to make an extension to the hive long enough to hold a large pie plate or pan. Make it as high as the hive. Make a bottom board long enough to reach back under the extension, then make a hole in back end of hive at bottom. You can put your feed in this extension without danger of robbing.

Examine for Foul Brood

In bad or cool weather to get them started I pour syrup in the hole at back and around the feeder, use a stick or corn cob at edge of pan for the bees to walk up on. Put syrup on them and the bees will find the feed without trouble, also lay small sticks or grass in feeding pan for bees to climb out on that get in syrup.

As foul brood is very common it will be well to examine any colonies not up to full strength. If they have the disease bad there will be a foul odor when you take off top of hive. If not bad, you can detect it by the capping on worker brood being slightly sunken. If in doubt take a toothpick and stick it down through the capping into the young bee. Withdraw slowly and if there is a string of tough slimy matter adhering to the toothpick you can be fairly sure there is foul brood present.

Bees should have 35 to 40 pounds of honey for winter stores. Sugar syrup is better than natural honey. Feed early before cold weather. Any colonies that run short of food in the spring can be fed successfully by lifting out the combs and pouring syrup in them. This is for cold weather feeding.

B. E. Long.

When Painting Shutters

WHEN we painted our farmhouse the last time our painter's spoke in very contemptuous terms of our window blinds—one said that if the "shutters" were his he would throw them on the brush pile and burn them up. Painters often do an unsatisfactory job on the blinds anyhow, so we relieved these men of further thought about our shutters—scrapped, brushed and cleaned them thoroughly and let them stand until the painters were gone.

When shutters gum up and stick after painting they may become a source of constant annoyance, in fact I have known shutters to remain in such a condition for years. In cleaning these shutters wherever the paint had beaded on the ends of the slats we reamed this out with an old hacksaw blade, using the blade naked of course without setting it into the hacksaw frame. So far as sticking slats are concerned they may be relieved in a fine prompt way with a hacksaw blade. A new 12-inch blade costs us six cents.

When we came to painting the blinds we used dark green paint (the house being white). We thinned the paint beyond directions and gave but a single coat. Blinds are always easily accessible for painting and may be stacked up in the shop beforehand and repainted in bad weather. Our thin paint acted about like a stain, in fact, but the shutters came out bright and fresh looking. Hiram Dobbin.

When you buy fertilizer get this assurance of quality



Swift's Red Steer Fertilizers are always sold under this Certificate of Quality. Look for it before you buy.

WHAT grade materials have been used in the fertilizer you buy? How scientifically have they been tested and combined?

Even "guaranteed analysis," important and helpful as it is, won't answer these necessary questions for you.

The Swift Certificate of Quality will!

Guaranteed analysis guarantees only the amount of plant food in the bag. The Swift Certificate of Quality, attached to every bag of Red Steer, gives you a definite assurance of quality.

BEST MATERIALS—plant food from the most productive sources.

DOUBLE MIXED—fertilizer thoroughly and evenly mixed and in good drilling condition so that each plant will get its share of plant food.

TRIPLE TESTED—in modern laboratories, assuring the right plant food in the right form and amount.

Swift's Red Steer Fertilizers bring large yields of plump, premium wheat, maturing 3 to 10 days earlier. A good clover catch and more hay.

Get your plant food for less money by buying Red Steer high analysis 4-16-4 or 4-16-10, recommended for wheat.

Ask your A. S. A. (Authorized Swift Agent) about it. Have him give you our free booklet on fertilizing wheat. Or write to the nearest Swift office listed below.



Look for this sign of your A. S. A.

Swift & Company
Fertilizer Works

Baltimore, Md.

Cleveland, Ohio

Swift's Red Steer Fertilizers

"It pays to use them"

MEET THIS

DEMAND!

is generally ex-
pected to be about 1
to 1 1/2 times the
normal price of late
seasoned butter.
The price of late
seasoned butter is
generally 10 to 15
cents higher than
the price of early
seasoned butter.
Butter surplus reduced
to 10 to 15 cents
below the normal
price of late season-
ed butter.
DROUGHT BRINGS PRICE BOOSTS
WASHINGTON, Aug. 12.—(U.P.)—Individual cov-
ers will share the farmers' troubles first in the
increased prices of late fruits and vegetables and in
dairy products, especially butter. Butter has gone
up 5 cents a pound since July 1.
(The Detroit News)

MILK PRICES INCREASE
Milk prices in several of the leading markets of Ohio
and the nation have been increased and further
increases are due before water. It is of
course unfortunate from the stand-
point of the city man who is
out of a job that has most
important food com-
modities to be increased in
price at this time. On the
other hand, unless the price
is increased now an even
more serious shortage will
result with even higher
prices later on.
Thus the old law of supply
and demand continues to
operate and the milk dealers
are now in a position to
operate at a profit. A human
element and under present
conditions farmers are not pro-
ducers of milk unless they are paid a
reasonable price for it.
(The Farmer)

**EXTEND CREAM AREA
TO MEET SHORTAGE**
Carload every other day from New York
League needed to supply demand
Cream again came into the forefront of attention
through an acute shortage of that product in the
Boston market. . . .
Vermont cooperative creameries have reported a
sudden and acute shortage of cream in the Boston
market and have requested permission to buy
western cream. . . .
A quick checkup with the Vermont cooperatives
showed that there was no cream immediately
available to meet the demand.
(New England Homestead)

with LARRO!

Milk shortage—here is a new profit opportunity for you. Don't lose it. It is no time to gamble with unproved, untested feeds. You are facing a greatly revived market, and you need the best feed you can buy—you need Larro.

Swing your herd into full and steady production on Larro Dairy Feed. Larro is the extra profit ration—the ration that maintains health and keeps the cows producing at their very best.

Now as always you want the ration whose splendid results will leave you more money after your feed bills are paid than you have ever enjoyed before. That's Larro.

THE LARROWE MILLING COMPANY
DETROIT, MICHIGAN

Larro

FEEDS THAT DO NOT VARY
FOR POULTRY • HOGS • DAIRY

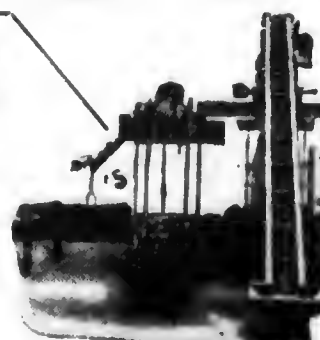
Larro Family Flour best for Bread, Biscuits, Cakes & Pies

READ THE ADVERTISEMENTS TO KNOW WHAT
IS BEST AND WHERE TO BUY

CIDER! How Profitable to Press it from Culls and Second Grade Apples

Many people are making big profits by operating a Farquhar Cider Press. Because the press is built in sizes suitable for Roadside Marketing, the Individual Orchardist and Custom Pressing. It is easily operated, exerts heavy pressure and gets better and richer cider.

Presses, Hammer Type Pulper
Rotary Cider Strainer, Quick Drain Racks, etc.
Ask for Bulletin on Roadside Press and Engines, Batters, Sawmills, Thrashers, Hay Bales and Farm Machinery.
A. B. FARQUHAR CO., Limited Box 146, York, Pa.



NESHAMINY GARDENS

By R. P. KESTER

SEVERAL years ago, after we had drilled a well at Neshaminy Gardens, I mentioned a subject which has been a controversial matter for generations. It is the pros and cons of "water witching." No doubt some will repeat one of the "Black Crow's" queries, "Why bring that up again?" but a reader writes as follows:

"The long dry spell has caused both our wells to go dry, and also most of the springs and wells in the neighborhood. I have decided to drill another well and want one that will be never-failing. I recall that you mentioned something about 'smelling' for water some years ago with the fork of a peach tree. Did you get a good supply? And how is it done?" A. M. W. Adams county.

There are no springs on Neshaminy Gardens. In fact, springs of good, never-failing water are not so plentiful in the south-eastern counties as they are up in the mountains where we used to live. Most home supplies of water are secured from dug or drilled wells, although there are many fine springs in some localities.

Even before we built the house on our place, we found a water supply necessary because of the many needs, but especially because we wanted to irrigate some of the vegetable crops. So it was decided to have a well drilled, and since a well would cost \$300 or more we wanted to be sure we would get an ample supply.

Sinking a well is always something of a gamble. It is reasonably certain that one will strike water almost any place if one goes deep enough; but that "if" is a disconcerting word. For ages men have tried to find some way by which water could be located certainly before starting the well. Is there any such method? Scientific men, and those who sneer at everything which their so-called reason does not approve, say there is not. But in spite of "reason" or the lack of it, some strange things occur; maybe they just happen.

One of the earliest impressions of my paternal grandfather was that he could locate water with a peach or witch hazel limb. I took it for granted, because he was often called on to find water and he always did. He stopped at our place one day when he was going on such an errand and took me, a little boy, with him. The place we went to had no water. The owner had dug a well forty feet deep, but it was dry as powder at the bottom. I remember seeing Grandfather get his forked twig and walk around over the lot. I remember how the twig would "dip" sometimes as he walked over the ground. Finally, he said: "If you will dig here you will get plenty of water, and it is not very far down." They did dig a well at the spot and found a never-failing supply at twenty-two feet. That well has been in continuous service since that time.

I have seen several instances of a similar kind in my time, one of them on the place where we used to live in Clearfield county. Of course, when I grew up and became sophisticated, as most people do when they get a little learning, I poliooped the idea as unreasonable. My intelligence (what there is of it) tells me there is no sense in it. But when we wanted to be sure of water at Neshaminy Gardens, my childhood faith returned, and I thought, as most people do about their little superstitions, "Well, if there is anything in it, I might as well be on the right side and try it."

The same credulity that would take note of such things would also lead one to believe that such "ability" might run in families. I knew that ar-

uncle had "inherited" the power to find water. Why not I? So I cut a forked limb from a young peach tree one day when no one was near and started. The thing would not work just where I wanted a well most, but finally, about fifty feet away, down went the twig. I walked around a good while in every direction. Always, at this same spot, the forked limb would twist around and point downward. I stuck a peg there and went home. I tried it on three occasions with the same result.

When the well-drillers arrived, I showed them the spot where they should drill and they set up their machine there. They struck water and when they were done it arose eighty feet in the well and stands there.

We had a long dry spell the next year in May and June. The plots containing beets, carrots, etc., were located near the well and we rigged up a series of pipes and hose and hitched the big tractor to the pump. This was operated continuously for eight hours, pumping water on the garden crops. There was no sign of water failure. (It is interesting to note that it rained the following night.)

Now I am not contending there is anything in the process of "water witching." There is nothing about it that looks reasonable. I shall not defend nor recommend it to others. But were all the instances I and others know merely coincidences? I don't know. The well at Neshaminy Gardens has an electric system attached now which works automatically and it has not failed during this long dry spell. Neither have the other deep wells in the neighborhood which were drilled on the hit-or-miss plan. I have merely related this experience because a reader asked for it. Take it or leave it.

Friendly Talks

By
Edgar L.
Vincent

NO man who goes through the world with the corners of his mouth turned down ever makes things better.

It is not so easy as it might be to go along day by day with a calm heart, a cheery voice and a smile that lights up the hearts of other folks. It takes a man of strong force of character not to break down, throw away his oars and let the boat drift.

But if we do this, if we yield to the temptation to be downcast and depressed now when times are perhaps the most trying any of us ever have seen, we surely carry trouble and discouragement to the hearts of other folks, and that we do not want to do.

A day or two ago I saw a man whose face was as long as a hammer-handle and a nail. Not a smile on it. He seemed to be weighed clear down to the bottom of things. A man near-by whispered to me, "That man don't feel very well himself, does he?" And that helped to make us all a bit more uncomfortable.

If you and I can just go on day by day hiding our troubles; if we can speak good and kind and helpful words, and if we can say, and from our hearts, "I know things are going to be better, and we must all take hold and help to make them better," it will not be so very long before the skies will begin to lift, the doubt and fear and uncertainty will pass away. We shall march ahead shoulder to shoulder, heart to heart, and we shall do our part toward making the world better.

More Readers on Farms in Pennsylvania than Any Other Farm Paper

PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Entered as Second-Class Matter at the Post Office
at Pittsburgh, Pa., under the Act of Mar. 3, 1879.
PUBLISHED EVERY SATURDAY BY

CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Pittsburgh, Pa., September 6, 1930

No. 10

Fighting Insects Fifty Years Ago

By GEO. F. JOHNSON

ON July 4, 1872, Simon S. Rathvon, entomologist of the Pennsylvania State Agricultural Society, wrote a proclamation to the farmers and gardeners of the Commonwealth—a proclamation which in many respects marks the beginning of modern potato culture in Pennsylvania. It was not a discussion of the importance of scientific cultural methods, of the value of certified seed, or of the control of blight by spraying, to be sure. But he announced the arrival of the Colorado potato beetle, described its life history and gave detailed control measures, including the dusting of plants with Paris green.

"The unpleasant task devolves upon me," wrote, "of proclaiming that the notorious Colorado potato beetle is at last domiciled in the Susquehanna Valley of Lancaster county." For us today who are so accustomed to the pest, it is difficult to understand the "fear and trembling" with which this announcement was received by Pennsylvania farmers. They had been hearing for ten years of serious devastation which the beetle was causing annually in the Middle West, and they knew it was slowly but surely spreading eastward. Entomological observers had reported a spread of about 70 miles per year.

By 1859 the insect had reached a point 100 miles west of Omaha. In 1861 it was reported in Iowa, in 1865 in Illinois, and in 1867 in Indiana. At this rate it was believed that the beetle would reach the potato growing section in eastern Pennsylvania about 1878. Imagine the consternation, therefore, when six years ahead of schedule, a small infestation came to light in Lancaster county—the first in Pennsylvania. Forty specimens were found June 28, 1872, in a potato field along the railroad about a half mile above the western boundary line of Marietta.

Paris Green to the Rescue

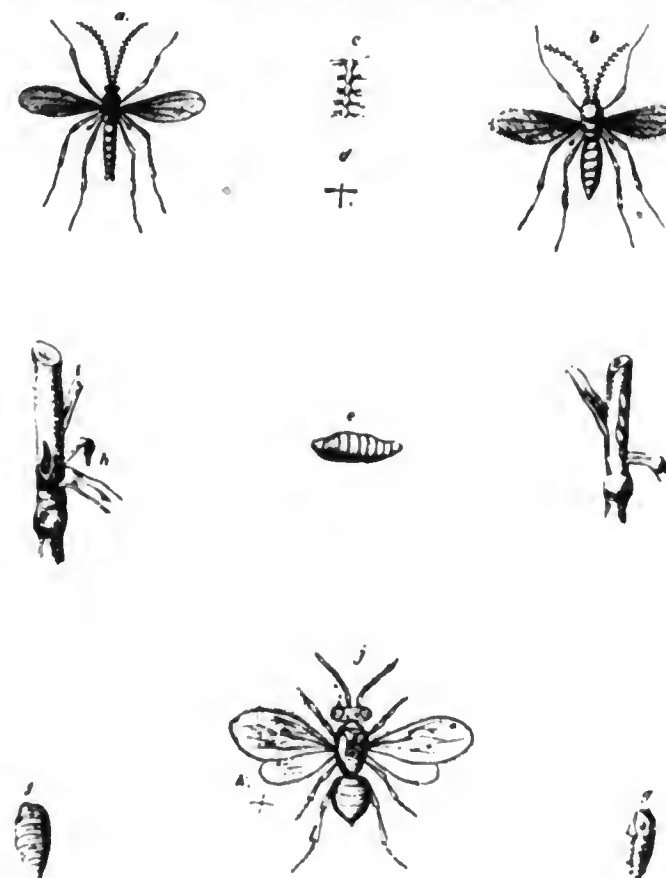
It was believed by Mr. Rathvon and others that the beetles had "hobbed" their way from the Indiana or western Ohio on east-bound freight trains. In fact, potato beetles were found in a patch near Worcester, Massachusetts, in 1870 when they were supposed to be not any farther east than western Ohio. Advocates of the present state and federal quarantine to prevent the rapid, artificial spread of destructive insects can gain great satisfaction from the fact that after the Colorado potato beetles once reached the direct railroad routes of Indiana and western Ohio, they were spread all over the East within a very few years, when it was commonly expected that at least ten years would be required.

By 1874 the beetles were more or less abundant in York, Lancaster, Dauphin, Lebanon, Berks, Chester and Delaware counties. In July, 1875, when in the Delaware breakwater reported the beetles for miles and miles was lined with potato beetles, their explanation was that the beetles, still eastward bound, had dropped off the waves. At Lewes, Delaware, the pier was covered by beetles that year and likewise the cargoes of fruit from the interior of Delaware and Maryland were covered with the "bugs." During the same year, farmers on Long Island, New York, suffered severely, the beetles destroying tomatoes and egg plants in addition to potatoes. Before the season was over, the insects actually swarmed on Coney Island and other portions of the coast.

It is any wonder that thousands of dollars were expended during those days in an attempt to per-
a machine that would effectively pick the

beetles from potato vines? Several such machines were patented apparently, but "none of them did as clean work as hand picking," according to Mr. Rathvon.

The changes which took place in potato culture in Pennsylvania within ten years from the time the beetles were first discovered marks in reality the beginning of a new era in agriculture. Never before had an insecticide become recognized as an



EXPLANATION OF THE FIGURES.

- The Male Hessian Fly.
- The Female Hessian Fly.
- A part of the Antennae.
- Lines indicating the natural size.
- The mature Larva, magnified.
- The Flax Seed state, magnified.
- The Pupae, just before the fly has evolved, also magnified.
- The Larva, magnified, and moving down towards the joint, the culm being removed.
- The Flax Seeds, as they are located above the joint, under the culm.
- The principal parasite (*Sentotellus distractor*) of the Hessian Fly, much magnified.
- Lines indicating the natural size.

Illustrations of the Hessian fly, made by Mr. Rathvon These were published in the report of the Pennsylvania State Board of Agriculture for 1877.

indispensable article on the farm. It was Paris green that brought to the great masses of farmers the realization that with a little effort, a chemical might be made to take the place of hours of tedious hand labor.

It was a great satisfaction in those days to people who could readily appreciate the dire consequences of neglect in beetle control to see people flock to the stores to buy Paris green in quantities "as though they meant business." But many difficulties and disappointments had to be overcome. "This is so emphatically an age of adulteration that it is difficult to get a genuine article of Paris green," Mr. Rathvon wrote in 1871. As a result it was hazardous for scientific men to give specific directions for using the product. In some cases the insecticide was too weak to be effective and in others, it was so strong it burnt the foliage.

Another very serious prejudice which had to be positively "exploded" was the idea prevailing

among some people at the time that placing Paris green on foliage would cause consumers to become poisoned when they ate the tubers. So generally was this belief accepted that for several years there was actually a difference in market prices between potatoes grown in patches where the beetles had been hand picked and in patches which had been dusted with the insecticide.

It is indeed interesting to note the changing attitude toward the potato beetle from one of great anxiety in 1872 to one of calm acceptance six years later. As early as 1874, Rathvon became convinced that the beetle could be controlled. "The industrial vigilance, the persevering and determined potato grower has nothing serious to fear," he said.

In 1876 this observation is reported: "Under any circumstances, the potato beetle is coming to be regarded as a permanent condition or fixture in agriculture, that must be provided for as essentially as plowing, planting and cultivating, in order to secure a crop. They are no longer regarded as a mere incidental, that may or may not occur, or can be with impunity neglected. It is sometimes astonishing what importance the subject has assumed, and with what interest the beetles are inquired about—fully as much as that which attaches to the state of the weather."

Introducing the Hessian Fly

And then again, in 1878, a prominent potato grower in Lancaster county made the following significant statement: "The Colorado potato beetle is one of our most important insect enemies, yet it may, to some extent, prove a 'blessing in disguise' since the application of Paris green is all that is necessary to keep it fully under control. I trust I will not exaggerate by saying that we now raise better crops of potatoes as they require closer attention than formerly. They are also planted at more appropriate seasons, i.e., early and late, instead of mid-season as was often the case heretofore. The application of fertilizer with Paris green, such as gypsum, lime and ashes, etc., also has a tendency to improve the crop."

There are many other illustrations of similar trends in agricultural developments resulting from insect depredations. The story of the Hessian fly is probably familiar to most readers of the Pennsylvania Farmer. This insect began its ravages in southeastern Pennsylvania not long after the Revolutionary War and has continued with varying degrees of seriousness ever since. The fly is said to have been brought to America during the Revolution in straw used as bedding for Hessian soldiers. Since Pennsylvania was the principal wheat producing colony, the fly not only made itself at home in the Commonwealth but made its presence felt very soon. By 1788, its ravages became so alarming that the King of England, fearing the introduction of the fly into England in wheat exported from the United States, prohibited the importation of the crop. However, the life history of the insect was soon carefully determined and once it had been fully demonstrated that there was little or no danger of the fly being spread in grain exportations, the King's order was revised.

By 1825 the fly had become so destructive that wheat could not be grown successfully within a radius of 30 miles of Philadelphia, according to historical records. Again during the years from 1830 to 1836 the losses became so great in southeastern Pennsylvania that the production of wheat was almost despaired of. About this time an officer of the United States (Continued on page 24.)

PENNSYLVANIA FARMER

Published Weekly
Consolidated with
PENNSYLVANIA STOCKMAN AND FARMER

Published Every Saturday by
CAPPER-HARMAN-SLOCUM, INC.
7301 Penn Ave., Pittsburgh, Pa.

President Arthur Copper
Vice-President T. D. Harman, Geo. M. Slocum
Manager Neil Laing

EDITORIAL STAFF
Editor-in-Chief E. S. Berard
Editors C. L. White, M. C. Gilpin
Field Editors Miles Horst, G. W. Harris

EDITORIAL OFFICES
Pittsburgh Harrisburg Philadelphia

CONTRIBUTING EDITORS
R. P. Kester J. H. Egan
Alva Agee H. Kandel
L. W. Lighty R. L. Scharringhausen
R. W. Blasingame A. A. Borland
J. P. Shigley S. W. Fletcher
W. D. Zinn Mrs. Gertrude Stewart
F. L. Bentley Gilbert S. Watts

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per agate line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for livestock and classified advertising. No deceptive, immoral or swindling advertisement inserted at any price.

Member Agricultural Publishers' Association,
Audit Bureau of Circulations.

Volume 103, No. 9 Established 1877

WESTWARD

THE American Institute of Cooperation will go west next year, as far as Kansas, where it will hold its four-weeks session at the agricultural college, beginning June 1st. The following year the University of New Hampshire will be host to the convention. By shifting around in this way the Institute hopes to educate all parts of the country in matters of cooperation, and it is correct in assuming that most of them need it.

THE MARRED LANDSCAPE

THE American Nature Association has published a bulletin entitled "The Road-sides of North Carolina," which shows vividly how the bill-boards and the advertising signs spoil the landscape. A survey reveals that one main automobile route of 383 miles has 2,564 major signs, not counting the small ones or those which adorn (3) barns or other buildings. Another route of 180 miles has 1,524 major signs, and shorter routes have many more in proportion to distance. But before leaping to any conclusions about the marring of North Carolina maybe we'd better take a look nearer home.

MORE LAMBS

THE Department of Agriculture estimates the number of lambs to be shipped out of 13 western states the last four months of this year at 1,200,000 head in excess of the number shipped during the same months last year. More of these lambs will come to market than last year because not so many were contracted in range territory. The supply of feeder lambs is going to be larger as well as cheaper than for many years. Feeders who are in position to take advantage of this situation may get back some of the money they lost on high-priced thin lambs and low-priced fat lambs last season.

FARMERS COURAGEOUS

THE exhibits at the Ohio State Fair last week showed slight evidence of the effects of drought. In agriculture and horticulture they were up to the usual high standard or close to it both in extent and in quality. In livestock they were above it in some cases. We were particularly interested in what is always the greatest exhibit at this fair, the people who attend it. The spirit manifested by the farmers of Ohio is wonderful, but it is only typical of that shown wherever drought has affected them. More jokes about the dry weather were heard than complaints about it. The farmer who had to soak his pigs to make them hold slop was at large. So was the ver-

acious observer who reported in his community frogs five months old which have never learned to swim. From a dairy district came the allegation that the cows are giving powdered milk. And one man assures us that he had to prime his hayrack with baled straw to get it to gather up his clover seed. Judging by the number of farmers at the Fair and their spirit our country's greatest industry is still a long distance from "ruination."

ON THE OTHER SIDE

ACCORDING to an official statement by the Dairymen's League Aaron Sapiro has "laid the blame for the higher milk prices to the Dairymen's League." Mr. Sapiro will be long remembered as a brilliant apostle of agricultural cooperation and a leading advocate of price control by great cooperative organizations. He preached both doctrines, for an adequate financial consideration, all over this country and western Canada. He acted as counselor for many cooperatives on similar terms. Now he is acting and talking as "ar-biter, treasurer and organizer" of the Harlem and Bronx Milk Dealers' Association, and charging that a cooperative organization has done just what he used to tell such organizations they could and should do. Times change, and Mr. Sapiro is usually where the "change" is to be found.

NUMBERS AND CONDITION

THE Bureau of Agricultural Economics says that "market supplies of cattle in the next five or six months probably will be about the same as a year ago, but supplies of fed cattle during the first half of 1931 are expected to be smaller than in 1930." The Bureau says also that the demand for stockers and feeders this fall will not equal that of last year. All these are conservative statements and in line with general expectations so far as numbers are concerned. But there is likely to be a marked difference in the condition of the cattle and other market stock. No doubt we shall see fewer long-fed steers, fewer heavy hogs and not so many overweight lambs as have followed more abundant corn crops.

EXAGGERATED

REPORTS of extensive marketing of livestock at any old price have been current for some time now—long enough for such a movement to show in the market receipts. But the receipts do not show that large numbers have been or are being sacrificed in any region. West Virginia, southern Ohio, Kentucky and Virginia have all been dry but the markets to which their livestock goes have not been overwhelmed with starved-out animals. Last week we talked with men who had gone out and tried to buy some of the stock they heard was available at any price. They said that such stock was always in the next county or in some other part of the country and they could never catch up with it. No doubt some stock has been forced to market but there has been and is no general or wholesale sacrifice of it. Shortage of winter feed is likely to result in a larger movement of livestock than shortage of grass has brought about.

THE BACKGROUND

A ROSE may grow no fairer and an onion wax no stronger where fence posts stand erect and gates refuse to sag; the pears may be no juicier and the hen-fruit no more youthful if the barn is painted and the doorway trim and neat, but these signs of pride in one's calling or affection for his home create a favorable impression on the passerby and are listed among the "silent salesmen" found effective in making roadside markets attract customers. In New Hampshire a survey of such markets found these things of enough importance to list them with proper signs and attractive displays as assets to the

roadside stand. It is true that one may unconsciously question whether quality products could be produced on an untidy farm or sold in an untidy stand. Attention to quality comes first, but if the quality is right why not support it by providing a suitable background?

WHEN TO CROSS BRIDGES

MOST of the things which promise to wreck agriculture never come to pass. Last winter heavy butter stocks were about to ruin the dairyman. Then the wheat surplus promised to pauperize the wheat growers. Between the corn borer which threatened the devastation of the Corn Belt and big crops which threatened the demoralization of the market growers of the golden grain were led to believe they might as well throw up their hands and select a soft spot in the cemetery. Now the butter supply has melted under the effects of hot weather and short pastures; we hear little of the corn borer and less of a corn burden, and all the big wheat crop is wanted. Even the Mediterranean fruit-fly, which had the citrus industry shaking at the knees from Key West to California, has been so far subdued that the Department of Agriculture feels justified in relaxing its restrictions about the pest. Anticipation exceeds realization in fears as well as in hopes.

WILL FEED WHEAT

A FARMER located in one of the driest spots in Pennsylvania writes: "I will have very little corn to feed this year, but I have 1,400 bushels of wheat which I am going to feed unless wheat should advance so that I can buy its equivalent in corn." This is mentioned merely to indicate that wheat feeding may have considerable effect on grain markets before the current crop year is over. The Department of Agriculture, in discussing cattle feeding, says: "The deficiency in the supply of coarse grains may be made up in part by feeding wheat where the relation of the price of wheat to that of other grains makes it desirable to do so." Oats will be substituted for corn to a considerable extent, and many feeders will confirm by experience what recent tests have indicated as to the value of oats in the finishing ration.

THE AREA AND THE PRICE

FOR the third consecutive year farmers' intentions to seed winter wheat show a reduction. The decline this year is 4.5 per cent. This is not large enough to indicate that farmers are paying special attention to the advice to cut acreage. It is a natural trend, mainly the effect of low prices. Acreage must ultimately adjust itself to the demand as interpreted by the price of a product. Sometimes this adjustment might be made to better advantage if done in some other way, but thus far no way has been found so effective as that dictated by profit or loss. It should be remembered that actual seedings may vary a lot from intentions, depending on weather and markets, also that some parts of the country are increasing acreage; but the wheat area of the country as a whole will probably continue to respond to the price.

A SOUND ADMONITION

WE rejoice at every opportunity to agree with the gifted orators of the Federal Farm Board, so we are glad to approve this expression by Chairman Legge in his speech at the Iowa State Fair: "Don't think that any agency can legislate farmers into prosperity. That is not merely a sound admonition but is a courageous one. For it was delivered in a state the inhabitants of which have been taught for years that agriculture can be legislated into prosperity, a state that sends Mr. Haugen to Congress right along and believes in his famous bill."

New Jersey Farm Comment

By G. W. HARRIS

THIS year we find Four-H cattle breeders returning with their prize winners of last fall to compete for further honors in the show ring. At the Flemington Fair last Tuesday several last year's champions were shown to again carry away honors in competition with over 70 club animals from six central and north Jersey counties.

John Scott, a Warren county club boy, again led Edgebrook Cup of Cream, a Guernsey cow now in the three-year-old class, into the ring to take two purple ribbons. This champion of last year was selected as the senior and grand champion of that breed. "Johnny" Scott has not been in club work many years but he is the owner of a champion which justifies his proud smile as he brings her into the show ring.

Myrtle E. Vorhees, Mercer county, took junior championship with her senior yearling, Fannie's Rose of Rocky Creek. This Guernsey heifer also placed second in awards for fitting against all animals in the show.

Champion in showmanship among girls was another Guernsey breeder, Marjorie Farry from Monmouth county. Marjorie, in showing her prize winning calf, was awarded first honors in showmanship during the Tri-County Four-H Club show held at Trenton the preceding week.

It seemed that all honors in showmanship were to go to Guernsey breeders. Roger Merrick, another Monmouth club member, was named champion showman among the boys because of the careful manner in which he exhibited his blue ribbon bull, Blossom Farms Noble Buddy.

King Alexina Piebe 6th, a Holstein bull owned and shown by Robert Field of Monmouth, won grand championship award. In the cow classes the junior champion, a senior yearling, Universal Donsegis Topsey, owned by James A. Lambert of Hunterdon county, also took the ribbon for grand championship in that breed. This animal was selected as the best fitted in the entire show. Although special mention was made for the fitting of this heifer and a few other animals, all of the animals shown in the ring at Flemington were outstanding as a result of the grooming and finish put on them by the Four-H'ers.

Senior champion Holstein cow, Kormayke Pontiac Odessa, was shown by a Hunterdon county club member, Alva Cronce, Jr.

This same Hunterdon County Four-H Club again took home a championship when Kenneth Hamilton exhibited his grand champion Jersey bull, Observers Golden Bard. Sweep Princess, a Jersey cow shown by George Savage of Mercer county, repeated her winnings at the Tri-County show by carrying off both senior and grand championships. In fact, George took home all of the purple ribbons awarded to Jersey females. His heifer calf was selected as the junior champion.

Monmouth county Four-H clubs scored highest in honors with their purple and blue ribbon animals. Of the 72 animals entered at the Flemington Fair Monmouth county sent 14; Middlesex, 14; Warren, 13; Hunterdon, 13; Mercer, 9; and Morris, 9.

After watching these boys and girls show their animals in competition against each other for highly prized honors, one is immediately impressed by an outstanding phase of training in Four-H junior dairy clubs. This is sportsmanship. It is one word which is not included in the Four-H Club symbol, but it has an important place in the show ring. All of these boys and girls are good sportsmen—they are graceful in winning or in defeat in spite of the fact that in the show ring they hope to receive rewards for months of labor in grooming their animals and years of work in breeding and growing possible prize winners.

IN the poultry show at the Salem County Fair Four-H Club members also made a good showing. W. A. Fitchhorn exhibited the best old trio of birds, a pen of Buff Orpingtons. The best young trio was a pen of Barred Rocks owned by Lloyd Eakin. Mary Ellen Jeffers won the award for the best pullet in the show with her White Leghorn, while James J. Pettit, Jr., exhibited the best cockerel a White Wyandotte.

AT the Salem County Fair last Thursday, Four-H Club owners of pure-bred dairy animals in that county competed for honors in the show ring. James J. Pettit, Jr., took more honors

than any other one individual in the championship classes and in the show ring when his Guernsey heifer, Harwick's Hazel of L. G., was awarded both the junior and grand champion ribbons for cows in that breed, and his bull, Bowwood Salem Club Boy, was judged the junior and grand champion. He won a bull calf for having the best fitted Guernsey in the show and was easily selected as the best showman in the ring.

The senior champion Guernsey cow, Sunnyside's Rose of Friesburg, was owned and shown by Edna Beal.

In the Holstein classes of cows, Walter Davis, a Gloucester county club boy, won the junior and grand champion award with his purple ribbon animal, Miriam Ellenwood Ormsby Segis. Ervin Lawrence, Salem county, took two championships with his bull calf, junior and grand champion. The senior champion bull was King Doedo of Fairview, owned by Wm. Coles, Jr.

Max Busby, Jr., carried off all purple ribbons in



THE WORLD'S CROSSWORD PUZZLE

the Jersey classes with his two club animals. His heifer calf was junior and grand champion, while another of his animals was given the same awards in the bull class.

There were over 40 club animals in the show ring at the Salem County Fair this year. This shows an increasing interest in dairy club work in Salem county, as nearly all of the animals entered were from Salem county clubs.

MISS ANNA C. PROBASCO of Yardville and Chester Tindall of West Windsor will represent New Jersey at the International Four-H Leader Training School which is being held at Springfield, Mass., September 7-20.

These two club members were selected to attend this school because of their years of outstanding club work. Here they will meet and exchange ideas with Four-H Club leaders from all the states in the Union and from Canada.

Miss Probasco has been a member of the Yardville Junior Dairy Club for the past six years and during that time has developed many prize winning Guernseys for the show ring. Chester Tindall has been a member of the same club for the past seven years and at the present time is president of the club.

ATLANTIC county farmers are holding their agricultural fair at Egg Harbor this week, September 3-6. South Jersey poultrymen are always well represented at the Atlantic County Agricultural Fair.

VOLUNTEER firemen always play an important part toward the welfare of small towns which are rural centers. For the first time a short course

for volunteer firemen of Maryland is being held at the University of Maryland. Representatives from all parts of the state will meet at College Park from September 2 to 5.

Each volunteer fire company in Maryland may send a delegate to attend the short course. Prominent fire chiefs from cities will address the group and one day will be spent at Baltimore for an inspection of the Baltimore Fire Department School of Instruction.

In addition to the talks by authorities on fire fighting and hazards, there will be demonstrations and motion pictures on first aid and resuscitation work. Also, details of raising funds for an organization of ambulance service will be discussed.

Such a school should become an annual event and prove useful in reducing great losses incurred from fire in the rural communities.

A HANDBOOK describing the standards of official grades of fruits and instructions for packing them for shipment has been issued by the New Jersey Department of Agriculture. Because of England's partial embargo on apples, the handbook will be helpful to growers who wish to sell their products for export. According to the embargo, only barreled or basketed apples of U. S. Fancy or U. S. No. 1 grades and boxed apples of the extra fancy or fancy northwestern grades may be imported into England, Scotland or Wales from the United States between July 7 and November 15. This bulletin may be obtained without charge from the Department of Agriculture, Trenton, N. J.

NEW JERSEY dairymen will visit the government experimental farm at Beltsville during their annual state-wide tour which is being held October 1, 2 and 3. Details for this tour have not yet been announced, but it probably will be similar to the dairy tour of three years ago when a large number of producers visited Beltsville and Washington.

FIVE barrels of Japanese beetles that had been collected in fifteen days on a fifteen-acre estate north of Philadelphia, was one of the striking sights observed by about forty Maryland growers, county agents and specialists, who made a trip into the territory that is heavily infested with the pest. The beetles were collected by means of 500 traps.

SIX colonies of parasitic wasps were recently released on farms in various parts of Maryland for the purpose of controlling the Oriental peach moth. The success which has been achieved in reducing the damage done by other insects through the introduction of parasitic enemies lends encouragement to the belief that similar results may be obtained in fighting this insect enemy of the peach crop.

Points at which the colonies were released were Glenburnie, Anne Arundel county; Berlin, Worcester county; Bel Air, Harford county; and two locations near Hancock, Washington county. The parasites were bred by the U. S. Bureau of Entomology and the Department of Entomology of the University of Maryland.

FOR the purpose of determining the relative effectiveness of different methods in controlling the Mexican bean beetle, the University of Maryland Experiment Station is conducting a series of tests on the Institution's farm near Beltsville, Md. Plots have been sprayed with the usual arsenical applications alone and in combination with various adhesives and Bordeaux mixture. Barium fluosilicate, sodium fluosilicate and cryolite are also being tested.

Work being done in the control of the Mexican beetle in this state has attracted the attention of scientists from other states and recently a group of them, together with representatives of commercial concerns and the U. S. Department of Agriculture, visited the field at Beltsville and observed results.

WHEN the combs of early-hatched pullets begin to turn red it is time to make the laying houses ready for them. Space for the early-hatched pullets can be found in the laying houses by removing market hens and culs, and concentrating the survivors in fewer pens, advises Prof. W. C. Thompson, poultry husbandman for the New Jersey Agricultural Experiment Station.

Fertility from a Desert

By E. S. BAYARD

WE left the ship at Tocopilla, Chile, for a trip to the pampas, where Nature has made rich deposits of nitrate rock. Just how these deposits were made is unknown. Three theories are advanced, each with its advocates. One of them is that the nitrogen is of atmospheric origin, the result of electric storms and rains in remote ages, the water flowing and seeping down, then evaporating and leaving the caliche or deposits of rock. Another is that it is the condensed survival of immense guano deposits. And the third theory is that the stupendous volcanic upheaval which created the Andes, the Sierras and other great mountain ranges in North and South America left this nitrogen bearing rock on the pampas—it is rarely found in the mountains but is plentiful in the high plains which lie between the ranges of the Andes.

For centuries these deposits of nitrates have been worked. The industry has been developed gradually from an exportation of about 800 tons in 1830 to an average exportation of 2,500,000 tons in recent years. Several processes have been used, all of them on the same principle—leaching the nitrate out of the rock by water and then crystallizing or precipitating it into salt, the nitrate of soda as we know it. The methods of leaching and of crystallizing vary, but the principle is the same in all processes. This has been done in a large way at plants—called oficinas—at many points in Chile, by companies controlled by British, Jugoslavish, North American and South American interests.

In recent years Chilean nitrate producers have felt the competition of the product of the atmosphere and the by-product of coal. Heretofore the Chilean government has imposed an export tax on the nitrate, and this has been one of the principal sources of the country's revenue. Both the companies and the government saw their income menaced by the competition of the other carriers of nitrogen. So they put their heads together and decided to cooperate for their mutual advantage. The negotiations which preceded the recent action of the producers and the government were long and difficult, but the outcome is the merger of most of the producers into a company with a capitalization of \$75,000,000 to be known as Compania Salitrera de Chile (Chile Nitrate Company).

Operated by U. S. Citizens

The government of Chile owns half of the stock in the new company, and after a period of three years is to derive its revenue from its profits. During the three-year period a fixed sum is to be paid to the government in lieu of the tax, which is abolished. The new organization is controlled by and operated by citizens of the United States, and this brings to pass vital difference from past practices, methods and costs as the patient reader will learn if he goes a bit farther with this tale.

Deposits of the nitrogen-bearing rock, called caliche, cover a vast plain in northern Chile, about 450 miles in length and varying from 15 to 90 miles in width. The caliche lies at varying depths below the surface but usually not more than 20 feet, big irregular cakes of nitrogen-bearing rock or ore in a bed of clay. Conservative estimates place the life of the deposits as virtually unlimited.

Time for Sports

The old way of mining was to dig down to the rock, take it out with pick and shovel, load it on carts or cars by hand and unload it the same way at the plant. It is evident that this must be a comparatively slow and costly process of getting the rock to the plant. The new method is to loosen the ground and the rock by enormous blasts, then scoop it out by power shovel into cars and run it into the plant and dump it by power into massive crushers, which will handle in three operations any lump not too big for the specially designed scoop of the power shovel. A blast was set off in our presence, not immediate presence of course, for we were at a safe distance. It consisted of 400 holes drilled in the rock and charged with about 9,000 pounds of

mighty big pile of rock as we saw afterward.

The Oficina Maria Elena was the first one we visited. It employs about 4,000 men and cares for a population of about 12,000 persons. The company has built a very good town here, with pleasant homes for its staff, club houses for its young or unmarried employees and comfortable but modest homes for its laborers. A plaza is laid out in the center of the town, a church is nearby, and movie shows, dances, tennis courts and a golf course provide wholesome amusement. The golf course is the only one I ever saw without any grass or other vegetation on it, but thus it is. The plant works in three eight-hour shifts, so that baseball and football can hardly be carried on, but boxing is occasionally seen and the usual indoor sports are provided for.

Superior Police System

The nitrate town lies many miles from any other. It is absolutely under the control of the Oficina, and all persons who come into it must pass certain well guarded gates. This means that they are guarded by the Chilean national police, who serve as policemen in all cities in the country. There is no such thing as a local or municipal police force in Chile, except traffic police. The national police is said to be very efficient, and the system is considered by our people down there to be much superior to our system. If the Pennsylvania State Police force were expanded to cover the whole state, city and country, we would have a system similar to that of Chile.



Filling a silo at Pennsylvania State College with a five horsepower motor.

Agricultural Engineering

By R. U. BLASINGAME

Hum of Silage Motor

SOON the silo filler will be heard. Many cutters are run faster than necessary. It takes lots of power to blow air but little to cut the corn. It will pay to cut down on the silage cutter speed, especially this year when the crop is going to be light. The best way to do that will be to put a larger pulley on the cutter.

Electric Motors

Silos, up to 45 feet high, can be filled with five and seven and one-half horsepower electric motors if (1) the knives are kept sharp; (2) knives are adjusted close to the shear-plate; (3) fan blades run close to the housing one-fourth inch or less clearance; (4) 1,800 r.p.m. motor five and one-half inch pulley and cutter 24-inch pulley; (5) pull with bottom of the belt, having the sag on the upper side, belt not twisted; (6) motor and cutter shafts about 15 feet apart; (7) feed bundles in butts to the ears of previous sheaf; (8) do not allow belt to rub on the frame of the machine.

Motors of this size will put up

electric energy consumption of about .9 kw. hours per ton.

Tractor Drive

Evenness of feed in a silo filler is always desirable. Nothing is gained in throwing on several bundles of corn at once even though one has plenty of power on the belt. It is likely to slug the machine, break something or clog up the pipe on account of slowing down the machine. If the filler's pipe is adjusted to blow the silage into the exact center of the silo, the light and heavy particles will distribute evenly and no tramping is required. A 170-pound man cannot pack silage anyway. The packing comes from the weight of the silage itself. This also saves the necessity of using a distributor pipe and an extra man.

Seed Bed Preparation

Within the past two or three years a very rugged and efficient tractor-drawn spring-tooth lever harrow has come on the market. This tool has remarkable penetrating ability and will stand up under rock conditions in

Everything is done by electric power at the Maria Elena plant. The power lines to the field are on poles erected on skids, so that they may be moved at any time. The tracks on which the cars run are built in sections, and the big shovel picks up a section and lays it down where it is wanted, building a railroad in an incredibly short time. The fuel which makes the electric current is oil from the Pacific Coast fields in our country. The so-called "steam shovels" operate by electricity as do the drills, the trains, all the machinery of a great plant and town.

If the big blast has not broken up the caliche so that the specially designed shovel can handle it any lumps too big for the shovel are moved aside and a small blast reduces them to the proper size before the shovel moves on. Comparatively few lumps are too big for the great scoop of this enormous shovel.

On arrival at the plant the rock is dumped by a "cradle," which simply turns the car upside down and then turns it back. As one car is dumped another is brought up by an electric mule, which runs between the dump and the line of loaded cars. The mule runs down and under the track, a car is moved over and ahead of it, then the mule emerges and pushes the car up to the dump. Everything is so timed that there is no delay—every car is on time, the mule is always ready for it and the cradle is always busy.

In a series of three crushers the rock is reduced to half-inch size, then passed to a broad endless belt which carries it to the vats. There it is covered with hot water, which runs through four vats and takes out the nitrate, goes through a plant which extracts that or most of it, reheats the water and passes it back through the vats for another load. As the nitrate becomes exhausted in one vat the water is drawn off, the residue is removed and dumped and the tank is refilled with fresh rock and again ready for the water.

Find Use for the Dust

This is a very crude outline of a mighty big plant engaged in an interesting process. I have not tried to describe the method of extraction or crystallization in detail, leaving all that for Dr. Lipman, who will describe the process. But the plant produces about 1,600 tons of granulated nitrate of soda per day at a cost far below anything possible with the old methods of mining and reduction. However, this plant is not considered 100 per cent efficient. For the dust from the crusher goes into the air and blows away—about 75 tons of it per day and it is rich in nitrogen. The next job is to save the dust—and it will be saved. So will the Chilean nitrate industry be saved by applying the methods in use in our great industries, whereby costly labor is saved, waste is prevented and a superior product is turned out at a minimum of cost.

The next day we drove out over the pampas—seeing no sign of life save the travelers on the highway. For there is practically no life on the pampas, vegetable or animal. Mirages were many, always shimmering water without anything on it or around it. Some of our party tried to photograph a mirage, but others declared it to be impossible to photograph an optical illusion.

A Desert City

On our way to Atofogasta we passed an Oficina in the process of erection, a new one called Pedro de Valdivia, in honor of that lieutenant of the Pizarro who founded Santiago. The Indians of Chile, unconquered by the race, asked Valdivia if he thought he could ever get enough gold. He replied that he could not, so they said they would give him enough—killing him by pouring molten gold down his throat. Thousands of men were at work on this new Oficina, which will be larger than Maria Elena and will be ready for work in a year and a half from the time it was begun. I saw 90,000 barrels of Belgian cement in one pile. Other things were on a vast scale—for an Oficina is not merely a big plant, it is a large community sufficient unto itself in a desert re-

September 6, 1930

"Flanders ain't killed and ain't goin' to die, I don't see what three deputy marshals are wasting all their valuable time for!" grunted Doody. He looked relieved.

"I'll tell you what one of them said when he started away from here," explained one of the men, with a touch of malice. "He said that in the first place they wanted to decorate state prison with a man that tried to kill a custom-house man, for there has been too much of an idea for some time that custom-house men were made to be hanged around and shot at, and et cetera. And in the next place—and this is the principal point, they know that aforesaid 'Clair Salter' is a white livered tool, and they propose to allow him to turn state's evidence—prob'ly, say, clippin' a year off his sentence for every man he names out of the gang he's nitched up with."

"What kind of a gang?" inquired Doody, trying to appear indifferent. But his forehead was knotted, and the hands that he curved round his pipe bowl to shield the match trembled visibly.

"Seems as though I've heard there was some kind of a name for that gang," suggested one of the men, squinting slyly at the others. A little crinkle of jocularity flickered round his mouth, and the others exchanged looks of quiet amusement.

"Didn't you ever hear of 'em up-river, and what they are called, Lud?" asked one.

"I don't believe I ever did." His cheeks were very red, and the dull flush showed under the sunburn on his neck.

"Seems to me it's something like Soakems," ventured a man.

"That's what the gov'munt will do to 'em when it catches 'em!" chuckled another.

"Seems to me it's more like Skokums," was the suggestion from the man who had done most of the talking. "But whatever their name is, they're in for it. Why, the United States gov'munt will send a whole fleet of ships to a foreign country when dirt is done to an American citizen.

Money ain't any object. Now there's been a lot of foolin' with custom-house men on this northern border for the last few years. Uncle Sam has growled some, but he's been busy and his mind took up, and all that, and nothin' special has been done. But if you'd seen the bunch of telegrams that the chief deputy marshal had in his pocket, you'd reckon that the old man was pretty hot this time, and he's goin' to have the man that did this shootin' if he has to line the United States army across the state and dig out every crack with a million needles."

Doody, eyeing the glances that the men shot at each other, realized fully that they guessed his connections with the Skokums. He understood that they were earnestly engaged in "beetoring" him, after the approved rural fashion. But he also realized that the authorities must be deeply incensed by this wanton assault on an officer. He got up somewhat uncertainly, picked up his duffel-bag and walked into the tavern, Shain following him. There was no one in the main room, and Doody, after a cautious glance round, mumbled:

"This gang business and this talk of turnin' state's evidence, and all that—you don't want to pay any attention to, son. It's all those fellers' put. But—but—you want to be careful about sayin' that you saw me with those chaps at Don-ah's place. You needn't be afraid of the United States gov'munt, any more'n I am."

But Shain noticed that the old man's chin trembled and that his face was gray.

THE host of Ubal Cyr's was a stocky French-Canadian of the real habitant type. His gray beard bristled and his eyes were like round, shiny black beads.

"W'y yo' call yo'rself Searway?" he demanded of Shain a few hours after his arrival. "I bat yo' ban, or yo'r fadder ban, a St. Basil Sirole."

"I don't lak how yo' folks w'at go on de States be continued, 'at dem Yankee spoil yo'r nam' for yo'. I don't ban on de States maself, but I hear all bout dat t'ing. Dey call L'Abbe—dat nice ol' nam' w'at our fadders bring from Normandy two hundred year ago—dey call it 'Labby.' Kah-h-h! Dat sound lak sour meek. Dey call Theriault 'Tario,' and dat sound lak a dog. Heh! so yo' ban com' from de Sirole family! Some of dem Sirole levee down on dat ol' farm now. Nice folk! W'at yo' do with M'sieu' Doody, hah?"

He whirled on the old smuggler. "Where yo' lak dis Sirole boy?"

"Well," drawled Doody, "when I came along toban, the Allegash he was servin' as mayor of Toban. So I brought him along with me. We found another fellow to take his job."

"W'at yo' t'ink yo' do for work? I might maff t'ink a Sirole boy a good boy to look after. My fadder know hees fadder."

"I suppose that what I say is between us," suggested Doody, lowering his voice, for men had come in from outside; and he proceeded, "I've given him a good lay, Ubal. We're goin' into the Violet Brook region after clam pearls. You know I've done mighty well with them the last ten

PENNSYLVANIA FARMER

(189) 9

The Skokums of the Allegash

By Holman F. Day

Copyright, 1907, by Perry Mason Company, Boston, Mass.

SYNOPSIS

The Mayor of Toban Jaws is the title, given in fan by the rough drivers who direct the stream of logs down the river, to the "runt" of the gang who is left alone all season to watch a ledge and prevent logs piling up there and causing a jam. This job falls to young Shain Searway on his first trip with the river men. At first very lonesome he learns to like the river and enjoys occasional visitors who use it as a thoroughfare. One of these is Lud Doody, a man who shows a rod to find treasure with and induces Shain to accompany him in search of a fortune. Leaving Doody's former partner, much against his will, to guard the Jaws and prevent a log jam young Searway prepares for his great adventure. After some traveling by canoe they stop at a settlement where they are met by several suspicious-looking characters who seem to know Doody.

"Dat w'at yo' tell me some time," replied Ubal, warily, "and I see yo' have some fat pocketbook, but I don't see de pearl w'at yo' sell."

"Yes, you have, too!" cried Doody. He snatched the tin box from his pocket and brandished it at the French-Canadian, who still surveyed him with twinkling eyes.

"Dat one I've saw," Ubal said, coolly, "but dat ban de sam' one yo' kip; dat ain't de one yo' sal for all dat fat pocketbook."

"Don't you think I go pearl-fishin' every season?" demanded Doody, with some heat, for the men in the big room were listening with grins, and the host's expression was altogether too satirical to suit him.

"I don't go with yo', returned Ubal. "I hear w'at

The Cheerful Plowman



A HARD DAY'S WORK

TODAY with Cousin Rufus Rolfe I played a weary round of golf, the first I've ever tried to play, perhaps the last, but who can say? With his wool shirt and knickers on and shoes from cousin Peter John I tramped ten thousand miles or more till every bone I have was sore. I swung those heavy clubs on high until I felt I'd surely die. I trudged along the weary green until my back was raw and lean.

Now listen: I have tramped for days behind a pair of dappled grays; I've trudged behind a balky ox from equinox to equinox; I've walked behind a team of mules that knew no laws and knew no rules; I've tramped behind a breaking plow, I've searched for hours to find a cow, but never have I felt so done when I beheld the setting sun as I did when that game of golf came to an end—that rascal Rolfe!

I could have rested up today out here at home while pitching hay; I might have forked a load of oats or loaded up a dozen shoats, I might have spent it shearing sheep or digging ditches broad and deep; I might have spent it fanning flax or digging out the butts of stacks; I might have spent it sprouting spuds, or helping wash a batch of duels; I might have spent it plowing corn, or bathing roosters all forlorn. There are a thousand ways, you see, I might have rested—me, ah me!

Ah yes, I lost a pleasant day at breaking rocks or pitching hay because I let that city scamp take me on that back-breaking tramp. I might have dug a well or two and felt relaxed when I was through, but foolishly I followed Rolfe who tired me out at playing golf.

J. E. T.

yo' say. I see one pearl dat yo' don't sell. I don hear nottin's of yo' ban up Violette way. But dem clam have very close mouth, so I hear, and so p'r'ap dey don't tell 'bout yo' ban dere. Heh?"

An appreciative bystander giggled outright. "I ain't lettin' anyone get a line on my clam brooks!" cried Doody, angrily. "I'm up and round and doin' before the rest of you are awake up this way. And I've got the stuff here to show for it," he added, slapping his broad hand on his breast pocket.

Doody was plainly excited. One capable of understanding the situation would have observed that the man had been deeply stirred by the report that the marshals were bound to catch Salter and force him to divulge his secrets, whatever they might be.

"I've known that you've been suspicious of me up this way for a long time," Doody went on. "There's only one thing you fellows know about for a private line, and that's smugglin'. Now I warn you good and fair that you don't want to do any more suspiciousin' of me along that line." As he walked about, he shook his finger under the noses of his listeners. "You're libble to get into trouble. There's a law against slander. I don't sit down in this tavern and cross my legs when I come this way and tell all about what I'm doin' and what I'm findin' and what I'm takin' to market in the city! Oh, I don't, hey? Because I have reglar business down in the city I'm a smuggler, hey? Be careful you men!"

He dragged a purse heavy with coin from his pocket and tossed it upon the floor. Then he pulled from his breast pocket the instrument that he had exhibited to Shain, and that he had called a divining-rod.

"That rod," he shouted, brandishing it above his head, his features working with agitation, "guides me to something that's worth havin'. Do you suppose I'm goin' to invite along a whole procession of gawkers to take my own away from me? You watch me!"

He went to the farther side of the room, clutched the ends of the whalebone strips, poised the chunk of cow's horn above his hands, and started with slow steps toward the spot where the coin lay on the floor.

As he approached the purse, the tip of loaded horn began to waver and then to drag downward. Doody set his teeth and curved his lips back from them. His forehead was knotted, and his huge hands were clutched so tightly that the cords stood out. Apparently he was using all his strength to keep the horn from tipping down.

BUT control of the little object seemed beyond his powers, and when he stood over the purse, the horn had revolved in his hands, and was pointing directly down at the coin.

"Gold and silver! That's what draws it!" cried Doody, rubbing his sleeve over his forehead, on which the beads of sweat stood out. "Do you fellows think that a man is goin' round poor when he has something like that in his kit?"

The men surveyed him with interest. One or two came forward to examine the rod more closely. One man expressed frank and voluble astonishment. Even Ubal himself, although his eyes still twinkled humorously, leaned forward in his chair in order that he might see more clearly.

"I ain't sayin' anything about the Violette pearl brooks now," the experimenter said, returning his rod to his pocket. "I don't have to say anything about 'em. No matter how much money I make out of 'em. You don't see me there, because I wouldn't have any business left if you should see me there. That's my secret, I'll have you know. You don't see me up in the St. Francis hills when that horn is dippin' to show the treasure! Find your own treasure! But there's one thing I will tell all of you. You want to be pretty careful how you hint to the United States marshals that Lud Doody is a smuggler and hasn't a business of his own. A business of his own, do you understand? And you all want to keep your noses out of it."

Some of the men had a little trouble in meeting the steady gaze that he turned on them, their self-consciousness revealing that there had undoubtedly been some babbling of suspicions.

The scene was becoming a bit embarrassing for all concerned when there was an interruption. The tavern gong thrummed under impatient rappings, sounding from an apartment behind the main room.

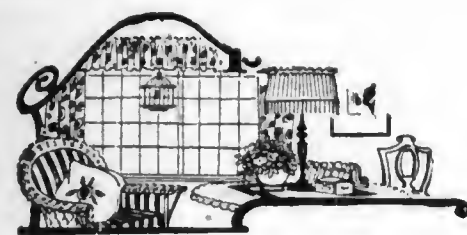
"We geeve eet to dat M'sieu' John Flanders to hang 'side hees bed to mak call for us," explained Ubal, moving away in answer.

In a moment he was back.

"Dat M'sieu' John Flanders was wake up by yo'r talk," he said to Doody, "and he lak to have yo' come onto hees room var' moch."

"You go back and tell John Flanders," said Doody, "that I'm busy, and that I pick my own company, and that I don't care about hobnobbin' with nor dry-nussin' United States custom-house officers." Doody was still angry and excited, and had abandoned diplomacy.

(To be continued.)



The Farm Home



Too Much Help

By LENORA BAILEY

"JEAN, you're doing that all wrong. Come, let Mother do it for you."

Jean had been strenuously endeavoring to lace her little shoes. She stopped and frowned at her mother's words, but reluctantly did as she was told.

"Come in, Mrs. Conner. I had to stop my work to finish dressing Jean. Now, dear, run along and play."

While the two neighbors visited pleasantly as friendly neighbors will, Jean got her scissors and an old catalog and began to cut out pictures in her crude, little-girl way.

"Why look, Jean, you are cutting off the woman's head! Let me do that for you!" exclaimed her mother.

"I declare, Mrs. Conner, it just worries me almost to death. Here Jean is five years old and it seems to me she can't do anything for herself—she can't cut out her dolls, she can't dress herself and she can't color the simplest little pictures. I wonder if she is awkward or dull or what is the matter?"

"Oh, she is all right, Mrs. Mills. Just don't try to hurry her progress too much; don't expect her to be perfect and she'll do nicely."

"Yes, but your little Betty does so much better, it seems to me. Her paper dolls look so neat. Then, too, she always dresses herself—now doesn't she?"

A Difficulty Mothers Meet

"Yes, in all her play dresses she does. I sometimes help if things are complicated. I tie her ribbons for her."

"Well, I have to do almost everything for Jean," sighed Mrs. Mills. "I get discouraged about it all."

"May I be quite frank and tell you what I think is wrong?"

"Surely you may. I'll be so glad to know. You won't hurt my feelings at all, and perhaps if I get your viewpoint it will help me to solve the problem."

"Well, frankly, I think you have fallen into the habit of doing too much for Jean."

"What do you mean?"

"Well, instead of telling or showing her what is wrong and letting her correct the error, you undo all her work and do it over again your way. So the next time she meets the same difficulty

she is no more capable of conquering it than she was before."

"I wonder if I do help too much. I suspect you are right. I guess I've been too impatient, and it is much easier to do things for her than to show her how to do them."

"That is the difficulty that most mothers have to meet. Of course it is much easier and less nerve-racking to do the thing oneself than to explain to the child how it should be done and then to watch the little fingers slowly accomplish what could be done for them in such a few seconds. I noticed you and Jean a few minutes ago when she was cutting out her dolls so awkwardly. She didn't look as if she really wanted you to do it for her and I wouldn't be surprised if you thought her unappreciative of your efforts to help her."

"Yes, I did."

"It is all because the child's natural tendencies urge her to do things for herself. We mothers sometimes unconsciously try to 'go agin' rater' as old Aunt Susie would say. The only wise way is to let the child 'learn by doing,' confident that Mother is always ready to give just the right amount of help when it is needed."

National Kindergarten Ass'n.

A Help for Making Jelly

I ACCIDENTALLY stumbled onto a great help in jelly making. I was short of dishes to cook the fruit in (which happened to be currants at the time). I looked the pantry over in search of something I could possibly use. I noticed an extra aluminum coffee pot on a high shelf. "Well, why not use the coffee pot, and also another in daily use?"

I stem my currants, for I can the fruit also. So the pots held quite a lot of currants. I boiled them five minutes for a first extraction, then ten minutes for a second extraction, simply pouring the very clear juice out each time. Then I canned the remaining currants right from the pot without water. How easy! The juice was measured in a cup as I poured it out!

Other fruits that work as well in this way are raspberries, blackberries, cherries and grapes. For home use no jelly bag need be used, but for exhibition purposes one could simply pour the juice through a bag. I mix the canned currants with three times their bulk of rhubarb at canning time or some other time. That makes the seeds unobjectionable, and raisins can be added to make pies. I also put the currants in mincemeat or with canned apples. Addie Folsom.

Prevent Diphtheria

By R. G. BEACHLEY, M. D., Dr. P. H., and NELL C. WESTCOTT

DIPHTHERIA is now a preventable disease. No longer does it sweep the country and snuff out hundreds of young lives as it did in former years. If your child should contract diphtheria you have only yourself to blame.

But this dread disease does take its toll and its victims are needless sacrifices to neglect and ignorance. Toxin-antitoxin or toxoid prevents it.

Take your child to your family physician or to a child clinic for the immunizing treatment. This treatment is given once each week for three weeks. After a period of from three to six months the child will be safe from diphtheria.

A few children require further doses to make the protection complete but your doctor can be absolutely certain of this by giving the Schick test several months after the first treatment.

Children under five years of age are particularly susceptible to diphtheria. Up to the age of nine months, however, the infant is practically immune but between the ages of one year and five years, the disease is most fatal. For this reason it is not wise to wait until the child enters school where, in most states, with your permission, he will receive the treatment.

The following brief table of statistics speaks emphatically by showing the death rate per 100,000 persons before and after toxin-antitoxin was given the children in these communities:

	1921	1922
Before Toxin	Antitoxin	After
San Joaquin county, Calif.	51.0	1.4
New Haven, Conn.	14.4	1.2
Syracuse, New York	44.2	1.0
Middletown, New York	has had no case of diphtheria since 1925.	

Through the cooperation of the parents, diphtheria is on the way to being wiped off the map. Protect your child and your community by taking advantage of immunization. It is simple, safe and sure.

PEAR CONSERVE

FIVE cups peeled and chopped pears, two lemons, five cups sugar, one orange, two cups raisins. Run fruit through the food chopper with coarse knife. Add sugar. Cook slowly till thick. Pour into hot glasses. Cover with melted paraffin. A. F.

Future Farmers

THE barn of the average farm serves numerous purposes. It is the storeroom and the garage. It is the barn that fodder and grain are stored, seeds and implements housed, horses, cows and, now and then, poultry kept.

But how many farmers realize the part the barn plays in the formation of their children's characters. We explain that our sons and daughters yearn to flock to the city, that they have no desire to remain on the farm their parents lived on. Is this almost wholly our fault? What have we done to make farm life interesting during the formative years of our children's lives on the old homestead?

The way to lead your children to the farm is by making the farm a pleasant place to live on, a place of interest and color.

The playground of your children is naturally the barn. Here childhood dreams are woven—not out of the home itself—but around the farm implements, farm machinery, farm tools of every sort. They watch the horses, cows, hogs, sheep and flocks of poultry. They thus absorb a start-ling knowledge of the occupation which their parents pursue and the way which they prefer for them.

Since the barn is the favorite playground of the farm, why not make it clean and attractive? First of all, thoroughly clean the outside and inside, and cleaning must of necessity be a thorough painting. Next time you are in town purchase enough lead paint to dress up the outside of the barn with an appealing coat of paint. Then tackle the inside with more white-lead paint, using a combination which will be pleasing to growing children.

This will make the children's playground attractive and in doing so will keep them satisfied to play at farming, until, almost before you realize it, they are doing actual farming.

Peach Cobbler

THE difference between a cobbler and a deep dish fruit pie with a crust seems to be that in the former the dough is under the fruit and in the latter the fruit is under the dough. When made with peaches cobbler is fine served hot, with hard sauce. A good dessert for one of those hot, sultry summer days, or when rain has cast a bit of gloom over the household. The directions for making it are given by the Bureau of Home Economics of the U. S. Department of Agriculture.

One pint sifted soft-wheat flour, one-fourth teaspoon salt, one tablespoon sugar, two teaspoons baking powder, six tablespoons fat, one-half cup milk, two quarts sliced peaches, sugar to taste, spice if desired, butter, one cup flour, salt, sugar and baking powder together. Cut in the fat, milk and mix well. Roll the dough into a thin sheet, cover the bottom and sides of a deep baking dish with it, and spread on the peach slices in layers. Sprinkle with the sugar and spice and dot with butter. Fold, put thin strips of the pasted dough across the top. Bake the cobbler in a hot oven (about 400 degrees F.) until the peaches are tender. Serve with hard sauce or cold with plain whipped cream.

ORDER YOUR FALL FASHION BOOK

Send 10c in silver or stamps for the 1930-31 Book of Fall and Winter Fashion Plates, showing 500 designs of latest misses' and children's patterns, a concise and comprehensive article on dressmaking, and some points for the needle artist. All valuable hints to the home dressmaker. Address: Pattern Department, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.



Signs of the New Season

No. 6941.—Ladies' dress. Cut in five sizes: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 4½ yards of 39-inch material. For contrasting material ½ yard 39 inches wide is required. The width of the dress at the lower edge with fullness extended is 2½ yards. Price 15c or two for 25c.

No. 6714.—Ladies' dress. Cut in two sizes: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 4½ yards of 39-inch material. For the tabs of ribbon ½ yard 39 inches wide is required. The width of the dress at the lower edge with fullness extended is 2½ yards. Price 15c or two for 25c.

No. 6922.—Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. A 6-year size requires 2½ yards of 39-inch material. For collar, belt and hand cuffs of contrasting material ½ yard 39 inches wide is required. Cut crosswise. Price 15c or two for 25c.

No. 6749.—Ladies' blouse. Cut in four sizes: Small, 24-26; medium, 28-30; Large, 32-34; extra large, 36-38 inches bust measure. A medium size requires 4 yards of 39-inch material. For contrasting material ½ yard 39 inches wide is required. Cut crosswise. Price 15c or two for 25c.

No. 6958.—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. A 10-year size requires 2½ yards of 39-inch material. Collar and cuffs of contrasting material requires ½ yard 39 inches wide. The tie of ribbon requires ½ yard. Price 15c or two for 25c.

No. 6947.—Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires 4½ yards of 39-inch material. The sash of ribbon requires 2½ yards. Price 15c or two for 25c.

HOW TO ORDER

Write your name and address clearly. State number and size of each pattern. Price 15c each, two for 25c. Send stamps or coin. Our Fashion Magazine will help in preparing your wardrobe. Copy only 10c. Address: Pattern Department, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.

No. 6941.—Ladies' dress. Cut in five sizes: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 4½ yards of 39-inch material. The width of the dress at the lower edge with fullness extended is 2½ yards. Price 15c or two for 25c.

No. 6749.—Ladies' blouse. Cut in four sizes: 34, 36, 38, 40 and 42 inches bust measure. A medium size requires 4 yards of 39-inch material. To trim with lace or edging requires 3 yards. For shoulder straps of ribbon ½ yard is required. Price 15c or two for 25c.

No. 6947.—Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires 4½ yards of 39-inch material. The sash of ribbon requires 2½ yards. Price 15c or two for 25c.

No. 6948.—Ladies' dress. Cut in nine sizes: 38, 40, 42, 44, 46, 48, 50, 52 and 54 inches bust measure. A 46-inch size requires 4½ yards of 39-inch material. For contrasting material ½ yard 39 inches wide is required. The width of the dress at the lower edge with fullness extended is 2½ yards. Price 15c or two for 25c.

No. 6167.—Ladies' house dress. Cut in nine sizes: 36, 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 46-inch size requires 5½ yards of material 39 inches wide or wider. To make collar, vestee, cuffs and belt of contrasting material requires ¾ yard 39 inches wide. The width of the dress at the lower edge with plait fullness extended is 2½ yards. Price 15c or two for 25c.

No. 6950.—Ladies' work pajamas. Cut in five sizes: 34, 36, 38, 40 and 42 inches bust measure. To make the garment of one material in a 38-inch size requires 4½ yards 35 inches wide. To make side front and back of waist portions of contrasting material requires 1 yard. Price 15c or two for 25c.

No. 6355.—Girls' dress. Cut in four sizes: 6 months, 1, 2 and 3 years. A 2-year size requires 1½ yards of 39-inch material. For pockets and facing of contrasting material on collar and cuffs ¼ yard 27 inches wide is required. Price 15c or two for 25c.

Timely Tips

FOR a trifle, I bought a rubber kneeling-pad, and it saves my knees, my hose, my time, my back, and my disposition when I wash linoleum floors, or do any painting or varnishing. It also acts as a cushion on my high stool while I iron. Sometimes I stand on it to iron.

When a child's toe-nails begin to turn down, his shoes are too short.

When Sonny is two, it is not too early to teach him to remove his cap when he enters a house.

Egg custards, ready for the oven, still uncooked, are often relished by children more than the baked custard, and are just as wholesome.

Milk is a food, and as such should be sipped slowly, not gulped down like water.

Figs are good cooked, put through the food-chopper. After this they may be eaten plain, or with cream and sugar, on cereal or custards, in sandwiches, gelatin.

A little lamp oil in the porch cleaning water will make it dust off easier after it is dry.

Let some cold water stand in the cocoa pan a little while before you wash it.

A towel-rack, screwed to the closet shelf so that the rack hangs downward, makes a good bar to hang clothes on.

Why is baby "cranky?" He might have a canker sore in his mouth. He might have sore throat. Don't neglect to look in his mouth.

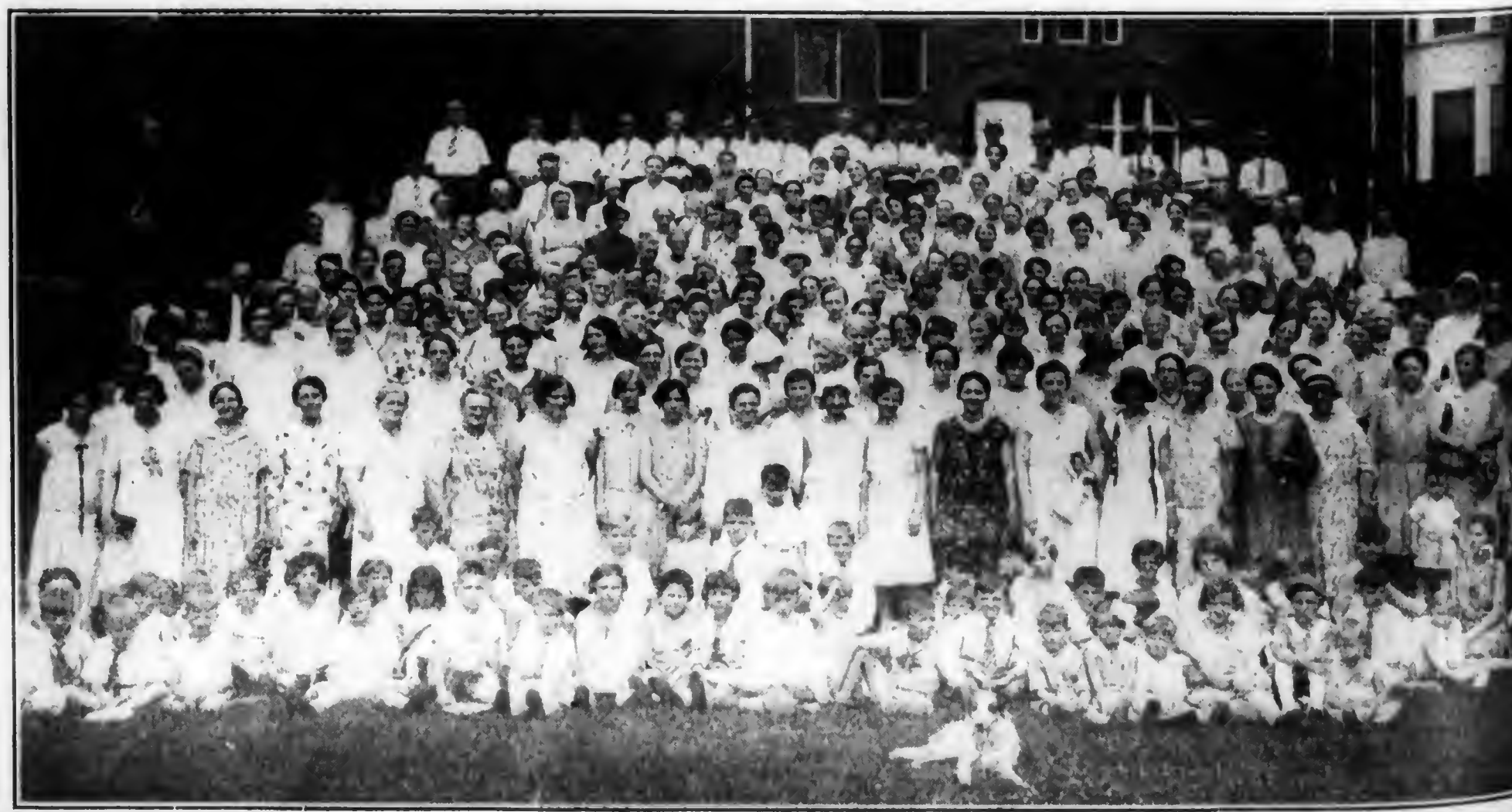
M. C. B.

CAN'T AFFORD NOT TO CAN TOMATOES

TOMATOES are one food that the homemaker can hardly afford not to make use of, says Miss Susan Z. Wilder, extension specialist in foods and nutrition at South Dakota State College. They are a very valuable food—particularly because of their richness in Vitamin C—they are inexpensive, they are easily canned, and they make a fine substitute for more expensive fruits which would have to be purchased in the winter.

When canning tomatoes select the best. Dip them in boiling water for at least a minute and then into a cold water bath to remove the skins and cores. Pack them tightly into jars, add a level teaspoon of salt to each quart and fill the jar with water or hot tomato juice. Process 15 minutes in the hot water bath. If the tomatoes are boiling hot throughout the jar can be sealed and then processed. Otherwise the sealing is only partial before processing and the final sealing is afterward.

"Four times a week is not too often to serve canned tomatoes," Miss Wilder says. "The family will not tire of them since there are so many different ways to serve them. They may be combined in relishes alone or with vegetables and served with whipped cream or salad dressing. Tomatoes sweetened, covered with a rich biscuit dough and baked, are good. Chopped crisp bacon may also be mixed in the dough."

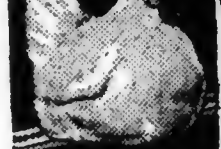


This picture was taken at the annual meeting of the Farm Women's Societies, of which there are twelve in Lancaster county, at the Millersville Teachers College, Millersville, Pennsylvania. The membership of the twelve groups is about 350.



FUMES Kill Lice Over-night.

*'Paint' the Roosts with
Black Leaf 40*



Only a small paint brush,
"Black Leaf 40" and a
few minutes' time for
lightly "painting" top of
roosts are required to de-
louse your entire flock.

The laborious methods of dusting, dipping
and greasing each bird are done away with.

Ask Your Experiment Station

Experiment Stations recommend the
"Black Leaf 40" poultry lice control.
Poultrymen all over the country
praise its simplicity and efficiency. If
your feed, seed, drug, hardware or
hatchery dealer cannot supply you,
order direct, sending dealers name.

Tobacco By-Products & Chemical Corp., Inc., Louisville, Ky.

"Black Leaf 40"
KILLS LICE WHILE FLOCK ROOSTS

BUY STEEN'S SUPERVISED BLOOD TESTED BARRED ROCK CHICKS
FOR EARLY BROILERS
STEEN'S POULTRY FARM, Box 2, DAGSBORO, DELAWARE

BEEF SCRAP with Iodine

The only Beef Scrap containing iodine in its
best form.

Iodine is necessary to the proper growth of dis-
ease-free chicks, to growing young stock, and to
enable layers to produce maximum yields. It is the
greatest known health builder.

Iodine mixed with Beef Scrap insures greater
assimilation of the entire ration. Less protein is
required and intestinal disturbances are greatly
reduced. This means more healthy chicks, better
growth, freedom from diseases and more eggs.
—Just order this Beef Scrap and reap the profits
that come from its use. No increase in price.

Consolidated By-Products Co.
30th & Race Sts. Phila., Pa.

PARKS' BARRED ROCKS

Buy Your Pullets, Cockerels & Chicks Now

Prices about 1-3 less than later.

The birds, healthy, free from reared vices, are
ready to start laying. Cockerels
and chicks are able to stamp the ability to lay and
run in your flock.

Park's strain is America's oldest and
most famous strain of Rock—carefully
selected, trained and produced for
over 150 years. Winners in all the best
contests. Records up to 325 eggs
laid in 131 days. Cockerels, roosters
and chicks average up to 271 eggs. Get latest
bulletin and catalogue.

J. W. PARKS & SONS Box 6, Altoona, Pa.

BROILER—RAISERS

SHIPPING CRATES LOANED FREE

SHIP YOUR LIVE BROILERS and other poultry to
New York's Oldest Live Poultry House. Est. 1883.
We are bonded commission merchants. Birds fed
return made daily. Highest prices. Our outlet is
unlimited. Inquiries about us. Write for catalogue,
rates, etc. Shipping instructions. Holiday Calen-
dar. Folder P-2. KRKAUR POULTRY CO., Inc.,
West Washington Market, New York City.

CHICKS

WILL SHIP C.O.D. 25 50 100

S. C. Reds \$2.75 \$5.00 \$9.00

Barred Rocks 2.75 5.00 9.00

White Leghorns 2.25 4.00 7.00

Heavy Mixed 2.50 4.50 8.00

Light Mixed 2.00 3.75 6.00

500 lbs. 100% delivery (regular)

W. A. LAUER, Box F, McALISTERVILLE, Pa.

QUALITY CHICKS

Barred Rocks \$4.00 per 100

Heavy Mixed 7.00 per 100

Attractive prices on 2 & 4
week old chicks. C.O.D. Post-
paid. Free trial 100% live arrival.

J. A. Baumgardner, Beaver Springs, Pa.

QUALITY CHICKS

Wh. & Barred Rocks \$8.00

Heavy Mixed \$7.00

All from free range, well culled flocks. Live prepaid
serial and quality guaranteed. Catalog free.

PEOLA POULTRY YARDS, Box 44, Beaver Springs, Pa.

Death for Poultry Worms



Nicotine and Kamala, the two ingredients
of Pratt's N-K Tablets, kills round and tape
worms better than any other vermifuges.
But they must be fresh. Pratt made these
fine ingredients practical to use. By encas-
ing them in hard, insoluble, airtight, seam-
less coating that preserves their freshness
and strength. Only the grinding of the
gizzard dissolves them. That releases these
fine ingredients fresh and potent. Right
where worms thrive—in the intestines. See
your dealer or order by mail according to
directions.

pratt's
(NICOTINE)
(KAMALA)

N-K TABLETS

Guaranteed "Satisfaction or your money back"

SEE YOUR DEALER, IF HE CAN'T
SUPPLY YOU, ORDER BY MAIL.

Enclose money order or stamps, indicating the
size and quantity desired. We pay postage.

Adult Size \$1.00

4-lb. Birds and over \$1.50

50 \$1.00

100 \$1.50

1000 \$12.00

PRATT FOOD CO., 124 Walnut Street
Dept. 143-A, Philadelphia, Pa.

Navy Brand Concentrated Buttermilk

From Tuberculin Tested Cows

23 per cent milk solids, 6 per cent lactic acid, thick
as custard with no foreign ingredients. Reduces
tickling and lessens danger from coccidiosis.
Increases egg production and promotes fertility and
hatchability. Good for chicks, broilers and laying
flocks. Sold direct from the factory in barrels of
about 485 lbs. Half barrels, about 300 lbs.

Write for prices.

TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, Pa.

BARRED ROCK CHICKS

Now ready for winter broilers. Hatchery
every week, 100 to 1,000. Prices, you
can afford. Special Folder FREE. Write
first to

W. KLINE, Box 20, Middlebrook, Pa.

The World's Poultry Congress

By H. C. KNANDEL

ENGLAND certainly did herself
proud, not only in staging the
greatest World's Poultry Con-
gress ever held, but in extending most
extraordinary hospitality.

One evening at the Crystal Palace
the Army and Air Force Ministry
staged a pageant, the like of which
we from the United States had never
seen. This event, which lasted for
more than two hours, was held in an
open air theater directly in front of
the mammoth Crystal Palace build-
ings. The first event was musical se-
lections by massed bands numbering
230 pieces. Next 32 horses, properly
mounted, performed as human beings.
These beasts could waltz, two-step,
one-step and do anything in the dance
line that our young Americans can do.
The Scotties with their bagpipes, 20
in number, added to our enjoyment.
The fourth act was that of heavy ar-
tillery. There were six sets of six
horses each, hitched together. This
made a total of 36 horses with 12
drivers. These magnificently trained
beasts kept perfect time with the
music and cut beautiful figures travel-
ing at fast speed and pulling the can-
ons behind them.

One of the prettiest sights at this
pageant was a group of 256 air re-
cruits. These young men, all of one
size and dressed in light blue sweat-
ers, white trunks, black socks and
white shoes, made a wonderful im-
pression. They went through various
acrobatic stunts with marvelous pre-
cision.

The "Heinz" of British Isles

The sixth event consisted of six
Scots with bagpipes who furnished
music for some clever Scottish dances.
Once again the massed bands came
on the field and played "Der Ringdes
Nibelungen" by Wagner and "Grand
Overture Solennelle 1812" by Tschai-
kowsky. The latter work was syn-
chronized with flares, bombs and
shells depicting graphically the story
the composer had in mind. As dark-
ness was coming on, the evening's en-
tertainment came to a close with the
thousands in attendance rising and
singing in unison "Abide With Me."

On Saturday, July 26, a very pleas-
ant trip was made by automobile to
Cambridge where we were the guests
of Chivers & Company (the Heinz of
the British Isles). This company owns
700 acres of land and controls over
2,000 acres. Most of the 700 acres
are devoted to the growing of fruit
and the canning of this is done on the
farm on which the large factory is
located. No vegetables are canned.
Most excellent Percheron horses,
Shorthorn cattle, Black Leghorn and
Light Sussex poultry and several
thousand hogs are owned by this
company.

Music and Fireworks

Some time was spent at Cambridge
University visiting some of the col-
leges which go to make up this great,
renowned English university. We
were entertained at tea in Magdalene
College by Doctor and Mrs. Ramsey,
Vice Chancellor of Cambridge Uni-
versity. King's College chapel was
also viewed. This structure was built
in the fifteenth century and is of
architectural design similar to that
of Westminster Abbey.

On Sunday many of us availed our-
selves of the opportunity of attending
church in St. Paul's Cathedral. Every
one who visits London makes an effort
to see St. Paul's, which is a massive
structure seating several thousand.
The rest of the day was spent by the
American folks in visiting various
parks and sight-seeing.

On Monday evening, July 28, a rare
musical treat was in store for all of
us. At 8:00 p. m. Sir Thomas Beecham
led an orchestra of over 300 pieces
and a choir of over 2,000 voices in

Handel's "Messiah." The soloists—
tenor, bass, contralto and soprano
were artists. I wish you could
have heard the grand finale, "The
Hallelujah Chorus."

At the conclusion of this concert
the Air Ministry of England staged
the largest and most impressive dis-
play of fireworks any of our people
ever witnessed. Some set pieces were
several hundred feet in length depict-
ing water falls, "the battle of the fa-
ture," etc. Hundreds of skyrocket
rising high into the air and break-
ing into most unusual colors and designs
thrilled us every minute during the
hour's celebration.

Long to be Remembered

The last night in London all de-
legates were guests of the Corporation
of London at Guild Hall—a most ex-
clusive building. Here the good of
Pennsylvania Dutchmen, the farmers
from New Jersey and Ohio mixed with
the elite of London's society. A hu-
fet supper was served to the hundreds
of guests and dancing was enjoyed by
those who desired or needed more ex-
ercise. The Lord Mayor of the Right
Honorable Sir William Alfred Water-
low K. B. E. and wife, together with
other high officials in London, wel-
comed us.

We all left London after visiting
our beloved ambassador, General
Dawes, with the feeling that Eng-
land certainly had done everything with-
her power to make the World's Poul-
try Congress a huge success. The
spirit of good will between the
countries represented cannot but be-
come to make for better understanding be-
tween nations. Every major branch
of the government of England coop-
erated to the fullest extent. We will
long remember the Fourth World
Poultry Congress held in London,
England, in 1930.

Possibly Worms

Hens in fine condition, suddenly go
lame and soon lie on side and cannot
walk. Seem to go partially blind and
do not eat. A Reader.
Clarion county, Pa.

THE symptoms you describe may
be the result of worm infestation
after effects of coccidiosis, limbering
from eating decaying flesh or range
paralysis. An examination of the in-
testinal contents will tell you whether
or not worms are present, the his-
tory of the flock will indicate
whether or not coccidiosis may be re-
sponsible, the contents of the crop
and gizzard will show if the birds have
been eating decayed flesh or not, and
if these three causes do not seem re-
sponsible, probably range paralysis is
the cause, in which case there is no
cure, except to remove the sick birds
from the flock, clean and disinfect the
house and maintain the best of con-
ditions in the hope that further cases
will not appear.

If you find worms you can use worm
capsules. If your flock has had coc-
cidiosis you can try enteritis powder,
the use of which is often beneficial in
overcoming the after effects of coc-
cidiosis.

If the birds have been eating car-
casses, give the flock a dose of
pound of Epsom salts per 100 birds
in the drinking water, and a table-
spoonful of the mixture to those that
cannot drink, and hunt up and burn
the decayed carcasses.

It is extremely difficult to tell the
cause of such troubles as you write
about at long range, and if you have
a number of cases, or the trouble does
not seem to clear up, it would be a
good idea to call in your county agent
whose services and advice are free
and who can doubtless determine the
cause of the trouble once he sees the
ailing birds.

R. L. S.

Here's a great NEW

Pathfinder

for HEAVY DUTY
at a PRICE SURPRISINGLY LOW



Goodyear Pathfinder Tires have made an
honest, respected name for themselves.
Those who have learned by experience
what good service these tires deliver,
will welcome this bigger, stronger Pathfinder
Heavy Duty.

Look at that tread! It is as thick, as broad, as
massive as any tread you can find on a heavy duty
tire—no matter how much you pay for it.

Beneath that big, thick tread are thousands of
Supertwist Cords, and any Goodyear user knows
what that means in extra wear.

Go to the nearest Goodyear dealer—examine
this great, new tire—judge it by any standard—
then ask the price and you'll say: "That's the
tire for me."

The 32 x 4
Pathfinder
Truck Tire



THE GREATEST NAME

IN RUBBER

GOOD YEAR

Copyright 1939 by The Goodyear Tire & Rubber Co., Inc.



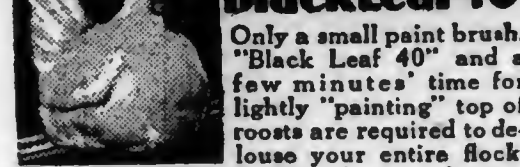
FUMES Kill Lice Over-night.

"Paint" the Roosts with
"Black Leaf 40"

Save Time
Save Labor
Save Expense

When chickens perch upon roosts "painted" with "Black Leaf 40", fumes are slowly released which permeate the feathers, killing the lice. Further details sent on request. The \$1.25 package will "paint" 100 feet of roosts (sufficient for 150 to 200 birds). Individual handling of birds is no longer necessary.

Tobacco By-Products & Chemical Corp., Inc., Louisville, Ky.



Only a small paint brush, "Black Leaf 40" and a few minutes' time for "painting" top of roosts are required to de-louse your entire flock.

The laborious methods of dusting, dipping and greasing each bird are done away with.

Ask Your Experiment Station

Experiment Stations recommend the "Black Leaf 40" poultry lice control. Poultrymen all over the country praise its simplicity and efficiency. If your feed, seed, drug, hardware or hatchery dealer cannot supply you, order direct, sending dealers name.

"Black Leaf 40"
KILLS LICE WHILE FLOCK ROOSTS

BUY STEEN'S SUPERVISED BLOOD TESTED BARRED ROCK CHICKS
FOR EARLY BROILERS
STEEN'S POULTRY FARM, Box 2, DAGSBORO, DELAWARE

BEEF SCRAP with Iodine

The only Beef Scrap containing iodine in its best form.

Iodine is necessary to the proper growth of disease-free chicks, to growing young stock, and to enable layers to produce maximum yields. It is the greatest known health builder.

Iodine mixed with Beef Scrap insures greater assimilation of the iodine ration. Less protein is required and intestinal disturbances are greatly reduced. This means more livable chicks, better growth, freedom from disease and more eggs.

—just order this Beef Scrap and reap the profits that come from its use. No increase in price.

Consolidated By-Products Co., Phila., Pa.

PARKS' BARRED ROCKS

Buy Your Pullets, Cockerels & Chicks Now

Prices about 1-3 less than later.

Big, husky, healthy, free range reared youngsters. Many pullets ready to start laying. Cockerels and chicks able to stand the ability to lay and pay in your flock.

Park's strain is America's oldest and greatest laying strain of Rocks—carefully selected, inseminated and pedigreed for race since 1898. Winners in all the leading contests. Records up to 329 eggs. Laying 41 1/2 days. Chances of report Rock averages up to 271 eggs. Get latest prices and catalog.

J. W. PARKS & SONS Box 6, Altoona, Pa.

BROILER—RAISERS

SHIPPING CRATES LOANED FREE

SHIP YOUR LIVE BROILERS and other poultry to New York's Oldest Live Poultry House. Est. 1863. We are bonded commission merchants. Birds fed returns made daily. Highest prices. Our outlet is unlimited. Inquire about us. Write for quotations, crates, etc. Shipping instructions. Holiday Calendar. Folder P-2. KRANKAUER POULTRY CO., Inc., West Washington Market, New York City.

CHICKS	WILL SHIP C.O.D.	25	50	100
S. C. Reds	\$2.75	\$5.00	\$9.00
Barred Rocks	2.75	5.00	9.00
White Leghorns	2.25	4.00	7.00
Heavy Mixed	2.30	4.50	8.00
Light Mixed	2.00	3.75	6.00

500 lots 500 to 1,000 lots 1000 to 10,000. Free range. 100% delivery Circular.

W. A. LAUER, Box F, McALISTERVILLE, Pa.

QUALITY CHICKS

100% live delivery guaranteed. Order from this ad or write for free circular.

C. P. LEISTER, Box P, McALISTERVILLE, Pa.

ULSH'S Superior Chicks

White Wyandottes and White Rocks, \$10.00 per 100. Barred Rocks, \$8.00 per 100. Heavy Mixed, \$8.00 per 100. 100% live delivery guaranteed. Cash or C.O.D. Postage paid. JAS. E. ULSH, Beaver Springs, Pa.

QUALITY CHICKS

Barred Rocks, \$8.00 per 100. Heavy Mixed, \$7.00 per 100. Attractive prices on 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, 98, 100. 100% live delivery guaranteed. Order from this ad or write for free circular.

J. A. Baumgardner, Beaver Springs, Pa.

Quality Chicks

Wh. & Barred Rocks \$8.00. Heavy Mixed, \$7.00. 100% live delivery guaranteed. Catalog free. PEOLA POULTRY YARDS, Box 44, Beaver Springs, Pa.

Death for Poultry Worms

Nicotine and Kamala, the two ingredients of Pratt's N-K Tablets, kills round and tapeworms better than any other vermifuges. But they must be fresh. Pratt's made these fine ingredients practical to use. By encasing them in hard, insoluble, airtight, seamless coating that preserves their freshness and strength. Only the grinding of the gizzard dissolves them. That releases these fine ingredients fresh and potent. Right where worms thrive—in the intestines. See your dealer or order by mail according to directions.

Pratt's (NICOTINE) (KAMALA)

N-K TABLETS

Guaranteed "Satisfaction or your money back"

SEE YOUR DEALER. IF HE CAN'T SUPPLY YOU, ORDER BY MAIL. Enclose money order or stamps, indicating the size and quantity desired. We pay postage.

Adult Size Chick Size

4-lb. Birds and over Under 4-lb.

50 \$1.00 50 \$1.00

100 \$1.25 100 \$1.25

200 \$2.50 200 \$2.50

500 \$6.00 500 \$6.00

1000 \$12.00 1000 \$12.00

PRATT FOOD CO., 124 Walnut Street

Dept. 143-A, Philadelphia, Pa.

Navy Brand Concentrated Buttermilk

From Tuberculin Tested Cows

28 per cent milk solids, 6 per cent lactic acid, thick as custard with no foreign ingredients. Reduces fat-picking and lessens danger from coccidiosis. Increases egg production and promotes fertility and hatchability. Good for chicks, broilers and laying hens. Sold direct from the factory in barrels of about 425 lbs. Half barrels, about 200 lbs. Write for prices.

TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, Pa.

BARRED ROCK CHICKS

Now ready for winter broilers. Hatchery week. 100 to 1,000 per 100. Price you can afford. Special Folder FREE. Write for it.

W. K. LANE, Box 50, Middletown, Pa.

The World's Poultry Congress

By H. C. KNANDEL

ENGLAND certainly did herself proud, not only in staging the greatest World's Poultry Congress ever held, but in extending most extraordinary hospitality.

One evening at the Crystal Palace the Army and Air Force Ministry staged a pageant, the like of which we from the United States had never seen. This event, which lasted for more than two hours, was held in an open air theater directly in front of the mammoth Crystal Palace buildings. The first event was musical selections by massed bands numbering 230 pieces. Next 32 horses, properly mounted, performed as human beings. These beasts could waltz, two-step, one-step and do anything in the dance line that our young Americans can do. The Scotties with their bagpipes, 20 in number, added to our enjoyment. The fourth act was that of heavy artillery. There were six sets of six horses each, hitched together. This made a total of 36 horses with 12 drivers. These magnificently trained beasts kept perfect time with the music and cut beautiful figures traveling at fast speed and pulling the cannons behind them.

One of the prettiest sights at this pageant was a group of 256 air recruits. These young men, all of one size and dressed in light blue sweaters, white trunks, black socks and white shoes, made a wonderful impression. They went through various acrobatic stunts with marvelous precision.

The "Heinz" of British Isles

The sixth event consisted of six Scots with bagpipes who furnished music for some clever Scottish dances. Once again the massed bands came on the field and played "Der Ringdes Nibelungen" by Wagner and "Grand Overture Solennelle 1812" by Tschakowsky. The latter work was synchronized with flares, bombs and shells depicting graphically the story the composer had in mind. As darkness was coming on, the evening's entertainment came to a close with the thousands in attendance rising and singing in unison "Abide With Me."

On Saturday, July 26, a very pleasant trip was made by automobile to Cambridge where we were the guests of Chivers & Company (the Heinz of the British Isles). This company owns 700 acres of land and controls over 2,000 acres. Most of the 700 acres are devoted to the growing of fruit and the canning of this is done on the farm on which the large factory is located. No vegetables are canned. Most excellent Percheron horses, Shorthorn cattle, Black Leghorn and Light Sussex poultry and several thousand hogs are owned by this company.

Music and Fireworks

Some time was spent at Cambridge University visiting some of the colleges which go to make up this great, renowned English university. We were entertained at tea in Magdalene College by Doctor and Mrs. Ramsey, Vice Chancellor of Cambridge University. King's College chapel was also viewed. This structure was built in the fifteenth century and is of architectural design similar to that of Westminster Abbey.

On Sunday many of us availed ourselves of the opportunity of attending church in St. Paul's Cathedral. Every one who visits London makes an effort to see St. Paul's, which is a massive structure seating several thousand. The rest of the day was spent by the American folks in visiting various parks and sight-seeing.

On Monday evening, July 28, a rare musical treat was in store for all of us. At 8:00 p. m. Sir Thomas Beecham led an orchestra of over 300 pieces and a choir of over 2,000 voices in

Handel's "Messiah." The soloists—tenor, bass, contralto and soprano—were artists. I wish you could have heard the grand finale, "The Hallelujah Chorus."

At the conclusion of this concert the Air Ministry of England staged the largest and most impressive display of fireworks any of our people ever witnessed. Some set pieces were several hundred feet in length depicting water falls, "the battle of the future," etc. Hundreds of skyrocket rising high into the air and breaking into most unusual colors and designs thrilled us every minute during the hour's celebration.

Long to be Remembered

The last night in London all delegates were guests of the Corporation of London at Guild Hall—a most exclusive building. Here the good old Pennsylvania Dutchmen, the farmers from New Jersey and Ohio mixed with the elite of London's society. A buffet supper was served to the hundreds of guests and dancing was enjoyed by those who desired or needed more exercise. The Lord Mayor of the Right Honorable Sir William Alfred Waterlow K. B. E. and wife, together with other high officials in London, were present.

We all left London after visiting our beloved ambassador, General Dawes, with the feeling that England certainly had done everything within her power to make the World's Poultry Congress a huge success. The spirit of good will between the countries represented cannot but help to make for better understanding between nations. Every major branch of the government of England cooperated to the fullest extent. We will long remember the Fourth World Poultry Congress held in London, England, in 1930.

Possibly Worms

Hens in fine condition, suddenly go lame and soon lie on side and cannot walk. Seem to go partially blind and do not eat. A Reader, Clarion county, Pa.

THE symptoms you describe may be the result of worm infestation after effects of coccidiosis, limberness from eating decaying flesh or range paralysis. An examination of the testinal contents will tell you whether or not worms are present, the history of the flock will indicate whether or not coccidiosis may be responsible, the contents of the crop and gizzard will show if the birds have been eating decayed flesh or not. If these three causes do not seem responsible, probably range paralysis the cause, in which case there is a cure, except to remove the sick birds from the flock, clean and disinfect the house and maintain the best of conditions in the hope that further cases will not appear.

If you find worms you can use worm capsules. If your flock has had coccidiosis you can try enteritis powder the use of which is often beneficial overcoming the after effects of coccidiosis.

If the birds have been eating carrion, give the flock a dose of one pound of Epsom salts per 100 birds in the drinking water, and a tablespoonful of the mixture to those that cannot drink, and hunt up and burn the decayed carcass.

It is extremely difficult to tell the cause of such troubles as you write about at long range, and if you have a number of cases, and the trouble does not seem to clear up, it would be a good idea to call in your county agent whose services and advice are free and who can doubtless determine the cause of the trouble once he sees the ailing birds.

R. L. S.

Here's a great NEW Pathfinder for HEAVY DUTY at a PRICE SURPRISINGLY LOW



Goodyear Pathfinder Tires have made an honest, respected name for themselves. Those who have learned by experience what good service these tires deliver, will welcome this bigger, stronger Pathfinder Heavy Duty.

Look at that tread! It is as thick, as broad, as massive as any tread you can find on a heavy duty tire—no matter how much you pay for it.

Beneath that big, thick tread are thousands of Supertwist Cords, and any Goodyear user knows what that means in extra wear.

Go to the nearest Goodyear dealer—examine this great, new tire—judge it by any standard—then ask the price and you'll say: "That's the tire for me."

The 22 x 6
Pathfinder
Truck Tire



THE GREATEST NAME IN RUBBER

GOOD YEAR

Copyright 1930, by The Goodyear Tire & Rubber Co., Inc.

INTENTIONAL 2ND EXPOSURE

smokeless powder. They break records at the traps and in the field, yet they sell at a moderate price. You'll like them.



Nitro Express Loads will outshoot any other make of long range load on the market.

Put more pep in the old scatter gun



Kleanbore Cartridges in rim fire and center fire sizes have brought a new standard of accuracy to rifle shooting on the range and in the woods. They protect the barrel from rust, corrosion, pitting and leading. You owe this protection to your rifle.

THE other fellows shot first and never touched a feather. Mr. Duck seemed to be safely headed for parts unknown. You thought he was out of range but you took a chance. Some shot! He hit the water with a splash—a clean kill. That's what happens time after time when you're shooting Remington Nitro Express Game Loads. They put more pep in your shotgun. For long shots at all kinds of game they're supreme. They outshoot any long range, heavy load on the market.

All Remington Game Loads are loaded by an entirely new method—guaranteeing uniform results. The powder is not measured by grains or drams, by weight or bulk, but by accurate tests which determine uniform velocity, pressure, penetration and pattern, a special load for each class of game. The shooter is assured of more clean kills per shot fired than with other loads.

Your dealer has Remington Nitro Express Shells and the other Remington Game Loads. They'll improve your shooting.

REMINGTON ARMS COMPANY, Inc.
Originators of Kleanbore Ammunition
25 Broadway New York City

Remington

© 1930 R. A. Co.

2445

A FAMOUS NAME A FINER CAR



Preferred . . YES!
. . . because it costs so little
and gives so much in years of service



PONTIAC BIG SIX

The 2-Door Sedan • Body by Fisher

There is a well-known preference among farmers for the Pontiac Big Six. It becomes more and more marked every season. And the explanation is that Pontiac gives so much in the performance and years of service.

Despite its remarkably low price, the Pontiac Big Six gives real big car performance. Its 60-horsepower engine—the largest in any low-priced six—takes you swiftly, smoothly, comfortably over any road. Hour after hour—at peak speed, up long, hard hills, through deep mud, clinging sand—the tougher the assignment, the quicker Pontiac proves what a thoroughly fine car it is.

Among the many reasons for its long life and dependability is the fact that with its moderate engine speed Pontiac's engine

is required to make fewer revolutions per mile of travel. The oil flow is under high pressure and absolutely positive. Crankcase ventilation helps to prevent the dilution of oil. The crankshaft is counter-weighted and equipped with the Harmonic Balancer for greater smoothness.

The Pontiac Big Six offers you bodies by Fisher with the extra safety and durability made possible by their hardwood-and-steel construction. It has Lovejoy Hydraulic Shock Absorbers, the non-glare windshield, improved steering, enclosed four-wheel brakes and other exceptional advantages. Ask your dealer about them. . . . Available in seven distinctive body types. All prices f. o. b. Pontiac, Michigan, plus delivery charges. . . . Oakland Motor Car Company.

Write for an interesting booklet which describes the design of the Pontiac Big Six with its many important improvements.

\$745

Remember . . . you can buy a Pontiac on special G. M. A. C. terms offered to farm buyers exclusively with payments at convenient intervals.

PRODUCT OF GENERAL MOTORS AND UP F. O. B. PONTIAC, MICHIGAN

records at the traps and in the field, yet they sell at a moderate price. You'll like them.



These Game Loads will outshoot any other brand of long range load on the market.

Put more pep in the old scatter gun



Kleanbore Cartridges in rim fire and center fire sizes have brought a new standard of accuracy to rifle shooting on the range and in the woods. They protect the barrel from rust, corrosion, pitting and leading. You owe this protection to your rifle.

THE other fellows shot first and never touched a feather. Mr. Duck seemed to be safely headed for parts unknown. You thought he was out of range but you took a chance. Some shot! He hit the water with a splash—a clean kill. That's what happens time after time when you're shooting Remington Nitro Express Game Loads. They put more pep in your shotgun. For long shots at all kinds of game they're supreme. They outshoot any long range, heavy load on the market.

All Remington Game Loads are loaded by an entirely new method—guaranteeing uniform results. The powder is not measured by grains or drams, by weight or bulk, but by accurate tests which determine uniform velocity, pressure, penetration and pattern, a special load for each class of game. The shooter is assured of more clean kills per shot fired than with other loads.

Your dealer has Remington Nitro Express Shells and the other Remington Game Loads. They'll improve your shooting.

REMINGTON ARMS COMPANY, Inc.
Originators of Kleanbore Ammunition
25 Broadway New York City

Remington

© 1930 R. A. Co.

A FAMOUS NAME A FINER CAR



Preferred . . YES!
... because it costs so little
and gives so much in years of service



PONTIAC BIG SIX

The 2-Door Sedan • Body by Fisher

There is a well-known preference among farmers for the Pontiac Big Six. It becomes more and more marked every season. And the explanation is that Pontiac gives so much in fine performance and years of service.

Despite its remarkably low price, the Pontiac Big Six gives real big car performance. Its 60-horsepower engine—the largest in any low-priced six—takes you swiftly, smoothly, comfortably over any road. Hour after hour—at peak speed, up long, hard hills, through deep mud, clinging sand—the tougher the assignment, the quicker Pontiac proves what a thoroughly fine car it is.

Among the many reasons for its long life and dependability is the fact that with its moderate engine speed Pontiac's engine

is required to make fewer revolutions per mile of travel. The oil flow is under high pressure and absolutely positive. Crankcase ventilation helps to prevent the dilution of oil. The crankshaft is counter-weighted and equipped with the Harmonic Balancer for greater smoothness.

The Pontiac Big Six offers you bodies by Fisher with the extra safety and durability made possible by their hardwood-and-steel construction. It has Lovejoy Hydraulic Shock Absorbers, the non-glare windshield, improved steering, enclosed four-wheel brakes and other exceptional advantages. Ask your dealer about them. . . . Available in seven distinctive body types. All prices f. o. b. Pontiac, Michigan, plus delivery charges. . . . Oakland Motor Car Company.

Write for an interesting booklet which describes the design of the Pontiac Big Six with its many important improvements.

\$745

Remember . . . you can buy a Pontiac on special G. M. A. C. terms offered to farm buyers exclusively with payments at convenient intervals.

PRODUCT OF GENERAL MOTORS

AND UP F. O. B. PONTIAC, MICHIGAN



Right
down my
alley

PRINCE ALBERT speaks my language like a native. The day I first lapped the tidy red tin, I somehow felt we were going to go places and do things together. Fragrant . . . friendly . . . know what I mean? You open the tin and close your eyes and revel in that wonderful aroma.

Then, with your smoke-hunger tugging at the bit, you load-up and light-up. Now you're getting it . . . that P. A. taste. Cool as the sign

"Standing Room Only." Sweet as reserved seats bought in advance. Mellow, mild, long-burning, right to the bottom of the bowl.

Pack it in your pipe or roll it in the makin's papers—it's one and the same to this double-barreled joy-smoke. There's no deep, dark secret about it . . . Prince Albert is *better* tobacco. It won't bite your tongue and it won't tire your taste. Why don't you try P. A.?

PRINCE ALBERT
—the national joy-smoke!



Every tin contains TWO full ounces of What Every Pipe Should Know

© 1930, R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

September 6, 1930

PENNSYLVANIA FARMER

(197) 17

The Barracks System

By R. L. SCHARRING-HAUSEN

THERE comes a time on the well-stocked poultry farm during the late summer when the hens are still laying heavily and the pullets are beginning to come into production and should be housed, when the poultryman is up a tree, so to speak, in regard to house room. If he sells off his older birds to make room for the youngsters, he will cut down his egg yield and income, while if he allows his laying pullets to remain on range, it will do them no good and he will suffer losses on that point. Fortunately, a system of management, known as the Barracks System will help him out of his difficulty and let him have the profits from both old and young birds.

Modern poultry practice leans toward the use of a long brooder house for starting chicks, which after they have acquired their feathers, are put in range houses leaving the brooder house idle. This idle building provides barracks or temporary quarters for the old birds which will still be profitable for several months to come, but which are not to be kept for another season, and allows the regular laying quarters to be cleaned up for the ready-to-lay pullets.

Lights for Good Birds

In working this system, no birds are sold from the laying flock until late in the summer except the obvious poor producers or real culls. At this time, the hens are gone over and all good birds which are not desired for breeders are removed from the flock and put in the idle building which is fitted up as a laying house, while any poor birds are culled out and sold for meat.

The good birds, which may or may not be molting, are given lights from three a. m., standard time, until daylight; fed extra meat scrap in the mash given a moist mash of laying mash and condensed buttermilk at noon green feed, and taken care of generally in the best way possible. This forcing process will insure good production through December, as even the molters will resume laying, and in January, when they are laid out, they can be sold and the house cleaned up and made ready for brooding.

This system can be employed only where there is an idle building on the



ROOSTER LAYS EGGS

I am sending a picture of a bird. It looks like a rooster but lays an egg every other day. We don't know whether to call it a rooster or a hen. It was a year old in April.

V. Wagner

place and where there are enough birds to make the trouble worth while. It also works best on Leghorns, which respond better to lights than do the heavier breeds, and should of course, not be used on hens which are to be kept for breeding purposes, as breeders require a rest during the winter months. If lights are not available, the forcing process will not be nearly so effective for Leghorns.

Facts and Figures

However, where conditions are favorable, the use of this system will prove profitable, not merely from the standpoint of egg production, but also from the increase in the value of the birds for meat as they are usually worth more per pound in January than in the fall.

As an example of how this system may work out, figures from a Connecticut flock are here quoted. On August 17th the flock was gone over, and of the 950 birds 350 were kept as breeders, 569 put in the Barracks, and 41 sold as culls. The barracks birds laid eggs to the value of \$860.21 above feed costs during the time they were kept, and when sold early in January, brought \$176.79 over their value as meat in August, owing to the difference in price, making a total gain over feed costs of \$1,037.

The Barracks System is fully described in Extension Bulletin No. 130, published at Storrs, Conn.

Poultry Problems

Barley in Scratch Feed

Would like to know just how much barley may be substituted for corn in chicken feed—especially for laying hens. With the corn crop so low it would be a help to know just how little corn, or corn meal, one can do with: using wheat, oats and barley together. Is it advisable to use buckwheat in the ration along with barley? C. W. J. Venango county, Pa.

BARLEY is commonly used in poultry rations, especially in scratch mixtures, replacing some of the corn. This grain is rather fibrous, but on the other hand, there is evidence that in using it in place of some of the corn, it has a tendency to reduce the amount of prolapsis and pickouts which often cause trouble in flocks. If you think it desirable to use barley, it could replace up to half the corn in the ration, but any change should be made gradually, increasing the barley and decreasing the corn over a period of several weeks until the desired mixture is obtained.

Buckwheat is a common ingredient of scratch grains, but not particularly desirable, as it is highly fibrous and hens very often do not eat it readily. As wheat is rather cheap, you can feed plenty of that grain with good results, and let the buckwheat be made into pancake flour. I

would advise you to ask the miller the difference between brown and gray middlings, and the analysis, and be guided accordingly. About five per cent of alfalfa leaf meal will give good results in the laying ration. Be sure to get the leaf meal rather than the ground alfalfa. R. L. S.

Feed for Young Birds

I have 1,000 chickens two and one-half months old. I would like to know how much feed to give them at one time, that is, at one meal. Kindly tell me what kind of feed would be best considering their number and age. Mrs. M. Williams.

YOUR young birds should have free access to some good growing mash in hoppers, and be fed what grain they will clean up in the evening and about half that quantity in the morning. They will probably consume about 200 lbs. of feed per day, and will require more as they get larger.

It is difficult to state any set amount of feed that will be consumed at any age, as much depends on size and condition of the birds, breed and amount of hopper space, which should be ample but generally isn't. An experienced poultryman feeds according to the appetites of his birds, rather than by any set rule. R. L. S.

Get More Eggs with Less Money by feeding FUL-O-PEP



POULTRY raisers everywhere have proved to their complete satisfaction that Quaker Ful-O-Pep Egg Mash improves egg quality, increases egg production and at the same time lowers feed costs.

The reason lies in the large amount of pure fresh OATMEAL in scientific combination with other grains into which is blended molasses, cod liver meal and essential proteins, carbohydrates, minerals.

Ful-O-Pep Egg Mash assures you more eggs, bigger eggs, better eggs, and better flocks, just as its companion feed, Quaker Ful-O-Pep Growing Mash, makes your young chicks grow into big, vigorous eager-to-lay pullets and choice meat birds. Ful-O-Pep Scratch Grains are second to none in giving heat and energy, supplementing Ful-O-Pep Mash, and in meeting the birds' natural instinct to scratch for their food. The Ful-O-Pep "50-50 combination," half Growing Mash and half Egg Mash, is exactly what you want to bring your hens quickly and safely through the molting season.

Your Quaker dealer has all these wonderful feeds ready for immediate delivery. See him today.

THE QUAKER OATS COMPANY, CHICAGO, U. S. A.

Quaker
FUL-O-PEP
EGG MASH

FREE Every poultry man wants to know how to get more eggs in cold weather. Our new booklet on Winter Egg Production tells you how. Sent absolutely free. Just write your

Name.....
Address.....
Mail today to The Quaker Oats Co., Dept. 11-1, 111 W. Jackson St., Chicago, Illinois



Right
down my
alley

PRINCE ALBERT speaks my language like a native. The day I first lamped the tidy red tin, I somehow felt we were going to go places and do things together. Fragrant . . . friendly . . . know what I mean? You open the tin and close your eyes and revel in that wonderful aroma.

Then, with your smoke-hunger tugging at the bit, you load-up and light-up. Now you're getting it . . . that P. A. taste. Cool as the sign

"Standing Room Only." Sweet as reserved seats bought in advance. Mellow, mild, long-burning, right to the bottom of the bowl.

Pack it in your pipe or roll it in the makin's papers—it's one and the same to this double-barreled joy-smoke. There's no deep, dark secret about it . . . Prince Albert is better tobacco. It won't bite your tongue and it won't tire your taste. Why don't you try P. A.?



Every tin contains TWO full ounces of What Every Pipe Should Know

PRINCE ALBERT
—the national joy-smoke!

© 1930, R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

INTENTIONAL 2ND EXPOSURE

September 6, 1930

PENNSYLVANIA FARMER

(197) 17

The Barracks System

By R. L. SCHARRING-HAUSEN

There comes a time on the well-stocked poultry farm during the late summer when the hens are still laying heavily and the pullets are beginning to come into production and should be housed, when the poultryman is up a tree, so to speak, in regard to house room. If he sells off his older birds to make room for the youngsters, he will cut down his egg yield and income, while if he allows his laying pullets to remain on range, it will do them no good and he will suffer losses on that point. Fortunately, a system of management, known as the Barracks System will help him out of his difficulty and let him have the profits from both old and young birds.

Modern poultry practice leans toward the use of a long brooder house for starting chicks, which after they have acquired their feathers, are put in range houses leaving the brooder house idle. This idle building provides barracks or temporary quarters for the old birds which will still be profitable for several months to come, but which are not to be kept for another season, and allows the regular laying quarters to be cleaned up for the ready-to-lay pullets.

Lights for Good Birds

In working this system, no birds are sold from the laying flock until late in the summer except the obvious poor producers or real culls. At this time, the hens are gone over and all good birds which are not desired for breeders are removed from the flock and put in the idle building which is fitted up as a laying house, while any poor birds are culled out and sold for meat.

The good birds, which may or may not be molting, are given lights from three a. m., standard time, until daylight, fed extra meat scrap in the mash, given a moist mash of laying mash and condensed buttermilk at noon, green feed, and taken care of generally in the best way possible. This forcing process will insure good production through December, as even the molters will resume laying, and in January, when they are laid out, they can be sold and the house cleaned up and made ready for brooding.

This system can be employed only where there is an idle building on the



ROOSTER LAYS EGGS

I am sending a picture of a bird. It looks like a rooster but lays an egg every other day. We don't know whether to call it a rooster or a hen. It was a year old in April.

V. Wagner

place and where there are enough birds to make the trouble worth while. It also works best on Leghorns, which respond better to lights than do the heavier breeds, and should of course, not be used on hens which are to be kept for breeding purposes, as breeders require a rest during the winter months. If lights are not available, the forcing process will not be nearly so effective for Leghorns.

Facts and Figures

However, where conditions are favorable, the use of this system will prove profitable, not merely from the standpoint of egg production, but also from the increase in the value of the birds for meat as they are usually worth more per pound in January than in the fall.

As an example of how this system may work out, figures from a Connecticut flock are here quoted. On August 17th the flock was gone over, and of the 950 birds 350 were kept as breeders, 569 put in the Barracks, and 41 sold as culls. The barracks birds laid eggs to the value of \$860.21 above feed costs during the time they were kept, and when sold early in January, brought \$176.79 over their value as meat in August, owing to the difference in price, making a total gain over feed costs of \$1,037.

The Barracks System is fully described in Extension Bulletin No. 130, published at Storrs, Conn.

Poultry Problems

Barley in Scratch Feed

Would like to know just how much barley may be substituted for corn in chicken feed—especially for laying hens. With the corn crop so low it would be a help to know just how little corn, or corn meal, one can do with: using wheat, oats and barley together. Is it advisable to use buckwheat in the ration along with barley? C. W. J. Venango county, Pa.

BARLEY is commonly used in poultry rations, especially in scratch mixtures, replacing some of the corn. This grain is rather fibrous, but on the other hand, there is evidence that in using it in place of some of the corn, it has a tendency to reduce the amount of prolapsis and pickouts which often cause trouble in flocks. If you think it desirable to use barley, it could replace up to half the corn in the ration, but any change should be made gradually, increasing the barley and decreasing the corn over a period of several weeks until the desired mixture is obtained.

Buckwheat is a common ingredient of scratch grains, but not particularly desirable, as it is highly fibrous and hens very often do not eat it readily. As wheat is rather cheap, you can feed plenty of that grain with good results, and let the buckwheat be made into pancake flour. I

would advise you to ask the miller the difference between brown and gray middlings, and the analysis, and be guided accordingly. About five per cent of alfalfa leaf meal will give good results in the laying ration. Be sure to get the leaf meal rather than the ground alfalfa. R. L. S.

Feed for Young Birds

I have 1,000 chickens two and one-half months old. I would like to know how much feed to give them at one time, that is, at one meal. Kindly tell me what kind of feed would be best considering their number and age. Mrs. M. Williams.

YOUR young birds should have free access to some good growing mash in hoppers, and be fed what grain they will clean up in the evening and about half that quantity in the morning. They will probably consume about 200 lbs. of feed per day, and will require more as they get larger.

It is difficult to state any set amount of feed that will be consumed at any age, as much depends on size and condition of the birds, breed and amount of hopper space, which should be ample but generally isn't. An experienced poultryman feeds according to the appetites of his birds, rather than by any set rule. R. L. S.

Get More Eggs with Less Money by feeding FUL-O-PEP



POULTRY raisers everywhere have proved to their complete satisfaction that Quaker Ful-O-Pep Egg Mash improves egg quality, increases egg production and at the same time lowers feed costs.

The reason lies in the large amount of pure fresh OATMEAL in scientific combination with other grains into which is blended molasses, cod liver meal and essential proteins, carbohydrates, minerals.

Ful-O-Pep Egg Mash assures you more eggs, bigger eggs, better eggs, and better flocks, just as its companion feed, Quaker Ful-O-Pep Growing Mash, makes your young chicks grow into big, vigorous eager-to-lay pullets and choice meat birds. Ful-O-Pep Scratch Grains are second to none in giving heat and energy, supplementing Ful-O-Pep Mash, and in meeting the birds' natural instinct to scratch for their food. The Ful-O-Pep "50-50 combination," half Growing Mash and half Egg Mash, is exactly what you want to bring your hens quickly and safely through the molting season.

Your Quaker dealer has all these wonderful feeds ready for immediate delivery. See him today.

THE QUAKER OATS COMPANY, CHICAGO, U. S. A.

Quaker
FUL-O-PEP
EGG MASH

FREE Every poultry man wants to know how to get more eggs in cold weather. Our new booklet on Winter Egg Production tells you how. Sent absolutely free. Just write your

Name and Address
Mail today to The Quaker Oats Co., Dept. 11-1, 141 W. Jackson St., Chicago, Illinois

Save Storage Space ... Eliminate Contamination

By grading potatoes and onions before they are stored, you insure storing nothing but A-1, disease-free stock. That increases the storage capacity of your house by eliminating culls, dirt and diseased stock, and prevents diseased potatoes from spoiling healthy spuds packed round them. Bin shrinkage is thereby reduced to a minimum.

Every particle of the surface of potatoes is revealed to the eyes of sorters, as the Roller Picking Table of Boggs graders automatically turns them over and over. Consequently no rots, cuts, rot-bitten or imperfect potatoes need be stored. There is space for two or more men to work even at the standard belt-ripe picking table of

BOGGS The Standard POTATO AND ONION GRADER

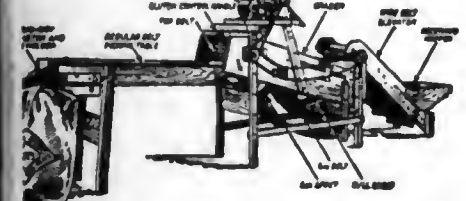
Potatoes can be dumped into the elevator hopper power Boggs Graders by the bag or barrel and they will come out perfectly sorted into No. 1 and No. 2 grades, with less than 3% variation from Government sizes. Up to 550 bushels an hour can be graded without danger of bruising or skinning even green stock.

When it is necessary to stop the machine, all you have to do is to operate the Jaw Clutch. No need to shut off the power.

You don't even have to stop machine when a cull is full. Just push the deflector to the other side of the chute, and potatoes will run into an empty sack while the other one is being replaced. In addition to saving money in this way, the grader saves labor. It does the manual labor of men 3 to 5 men.

Boggs Graders are made in several models. Prices range from \$82.00 up.

Write for free catalog



Boggs Manufacturing Corp.
22 Main Street, Atlanta, N. Y.
Sister cities: Atlanta, N. Y. Detroit Lakes, Minn.

ROHRER'S Hi-Yield SEED WHEAT

Hundreds of farmers have reaped bumper harvests from Rohrer's Hi-Yield Reclaimed Seed Wheat. Free samples and prices on one or all these varieties will be sent on request:

Leap's Proficient Beardless
Forward Beardless
Pennsylvania 44 Bearded
Lancaster Fullester Bearded

EIGHT PREPAID ON Five bushels or more.
L. ROHRER & BRO.
Box No. 4, Smoketown,
Lancaster County, Pa.

IAN WANTED! WITH CAR

My Money Starts You In Business... A New Easy Way

I CAN use a few more married men of good appearance, fair education, who will work 1 week in your city and ship your stock to you in a caddy. You must be able to furnish good references and have car for delivery. This is not a high-pressure selling proposition but a permanent business of your own. Profits are large to start but will increase as you learn the business. Some are making \$1,000 and \$2,000 a year. Write to me and I will send full details of my "No Investment" offer at once.

Address: G. A. Ostrom, McCann & Company, Desk 2-5309, Wilkes-Barre, Pa.

HORTICULTURE

By S. W. FLETCHER

Several weeks ago Dr. Fletcher had an article in the Pennsylvania Farmer regarding the fine law that the state of Massachusetts has to protect the farmers' and fruit growers' interests in that state against deer and other protected game. Will you please tell me, and hundreds of other farmers and fruit growers, why the state of Pennsylvania does not have as good a law to protect the farmers' and fruit growers' property from destruction by game that is owned and protected by the state as does Massachusetts?

George H. Lincoln,
Lackawanna county, Pa.

THE correspondent must be aware that most laws are the result of compromise. Whether the subject under discussion is the tariff, or Sunday Blue Laws, or prohibition, or damage to farm crops by deer, there are likely to be divergent views and conflicting interests. The recent tariff legislation, apparently, does not fully satisfy anybody. That is a pretty good sign that no one group got everything it wanted, and that the measure is the best that could be devised under the circumstances.

So it is with the game laws. The parties at interest in this controversy are the farmers on the one hand and the sportsmen on the other. Many farmers, perhaps a majority of them, are also sportsmen; but only a small fraction of the sportsmen are farmers. In the main, therefore, this is a conflict in point of view between the city and the country. The city and town sportsmen desire that game shall multiply to the fullest extent, so that they may enjoy recreation in the country. Most farmers, also, desire an abundance of game, and own a well-oiled shotgun or rifle. But they are farming for a living, and if game multiplies to the point where it is a menace to farm crops they seek relief. They are farmers first and sportsmen afterward. The city men are sportsmen first, and last, although most of them are broadminded enough to appreciate the farmers' point of view if it is presented to them without bias and without heat.

Progress in Recent Years

The reason why the state of Pennsylvania "does not have as good a law to protect the farmers' and fruit growers' property from destruction by game that is protected by the state as does Massachusetts" is because the farmers' case has not yet been fully presented to the sportsmen. Our Pennsylvania Council of Agricultural Organizations, representing all the state-wide agricultural organizations, has championed this cause in the legislature. The State Board of Game Commissioners has been open-minded; naturally it reflects chiefly the point of view of its constituency, the sportsmen, but it has not been unduly prejudiced against the case of the farmers.

Under certain restrictions, the farmer may now kill game that is destroying his property; formerly this would have made him a law breaker. The fencing policy of the state has helped to solve the deer problem for some fruit growers, though at greater expense to them than is justified. Sentiment in favor of a limited open season on both buck and doe, not in the state as a whole, but only in districts where the deer population is excessive, is gaining ground, even among sportsmen.

Attitude Toward Does

These are evidence that the leaven is working. Ten years ago few sportsmen would admit that damage to farm crops by protected game was a problem. Now, most of them, or their representatives, not only admit it, but are giving serious and fair-minded consideration to a solution. It is my personal opinion that, ultimately, we should have compensation by the state for damages to farm crops caused by

protected game, as in Massachusetts. Some of the representatives of the sportsmen cannot at present accept this point of view. I believe they will come to it in time.

The answer to this question, then, is that the way is being prepared, by a campaign of education and by mutual adjustments, for an ultimate solution of this problem that will be as fair to the farmers as it is to the sportsmen. Partisan agitation and denunciation on either side of the question will only delay an equitable outcome of the issue. The Agricultural Council has represented the interests of the farmers in matters of legislation on this subject, and with notable success. The Council should receive the united support of its constituency.

Culture of Apple Trees

AN experiment on the culture of young apple trees conducted at the Mahoning County Farm by the Ohio Agricultural Experiment Station has been the subject of considerable comment. Apple trees set in 1922 on virgin land which has never been plowed or cultivated came into bearing earlier and have made a better growth than trees planted on the same land but kept cultivated with intercroppings and cover crops. The trees in the uncultivated block have received an application of nitrate of soda, beginning with one-fourth of a pound a tree in 1924 and increasing to two and three-fourths pounds a tree in 1929. The trees in the cultivated block have received no fertilizer.

The conclusion has been drawn from the experiment by some that it would be better to keep all young apple orchards in sod, with addition of nitrate, than in cultivation. The Ohio Experiment Station, however, undoubtedly would be the last to make such a sweeping generalization. The results simply show that under the conditions prevailing in this particular experiment it was possible to grow as good or better apple trees without cultivation as with cultivation. This might not be true under other conditions.

A Common Error

In the first place, this was virgin land, hence the soil was full of organic matter, and uncultivated trees would grow better than if they were planted in an old field and left in sod. More nitrate would be needed on an old field to get an equivalent growth. In the second place, the stumps were still standing, hence the field was difficult to cultivate. When the orchard site is steep, or rocky, or stumpy, the sod mulch method may be more practicable, even for young orchards, than cultivation and intercroppings.

In the third place, the question of the relative net return from the land always must be considered by the commercial fruit grower. Even though it may be possible to grow as good or better trees in sod, with nitrate added, as in cultivation, if a crop of corn or potatoes brings a greater income from the use of the land than leaving it in sod, they are likely to be grown; it is a question of farm economics, as well as of tree growth.

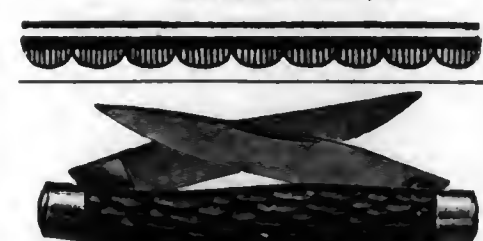
In the fourth place, the sod mulch management of young orchards may be wholly impracticable in some places because of the greater difficulty in controlling mice.

This is a good example of a common error that of generalizing from scanty premises. This method of handling a young apple orchard undoubtedly is satisfactory under some conditions. But the great majority of fruit growers will continue to find cultivation and intercropping more practicable.

HOFFMAN seed wheat

Don't try to save the cost of Seed Wheat by planting old wheat. Buy new, vigorous seed—Hoffman Lancaster County wheat which can produce 5 to 10 bushels more per acre with no more expense. One bushel more pays for your new seed. Hardy, sound, disease free, absolutely weed and rye clean, carefully graded, heavy yielding. Less seed required. Bags free. Freight paid. Ask for information and samples today.

A. H. HOFFMAN, Inc.
Box 428, Landisville,
Lancaster Co., Pa.



This Remington Pocket Knife

has a sharp blade and two keen cutting edges of superior steel, so shaped that they are especially good for skinning and dressing fish, game birds, and fur-bearing animals. We will send you this knife.



NATIONAL SPORTSMAN, 107 Transit Bld., Boston, Mass.

DIBBLE'S SEED WHEAT

HONOR The best White Wheat. Over 100 acres of the Dibble Farms Yielded 32-43-50-55 bushels per acre right here at Honeyvale Falls, Pa. Forward—The best Red Wheat. Crop from 12-14 bushels per acre. Either variety \$1.50 per bushel. Try and increase your wheat crop 10 to 20 bushels per acre at an extra cost of around a dollar per acre for new seed. Rustless Rose Rye, \$1.50 per bushel. Northern grown Grimm and Common Alfalfa, 10 lb. Timothy 90¢ per bale. New crop September shipment \$3.75 per bushel. Circular Price List and Samples Free. Address: Edward F. Dibble Seedgrower Box F Honeyvale Falls, N. Y.

Reading Bone Fertilizer

Quality Service Satisfaction
HIGH GRADE FERTILIZERS
READING MEAT MEAL
DOW'S AGRICULTURAL SPRAYS
(This trade mark means quality)
Ask your dealer for Reading Bone Fertilizer.
Reading Bone Fertilizer Co., Reading, Pa.

Burpee's Bulb Book—free
It tells you of the flowers that will bloom this winter in your garden and those that will bloom next spring. Write for a copy of this free bulb book.
W. ATLEE BURPEE CO.
877 Burpee Bldg., Phila., Pa.

YOU CAN EARN BOTH
Handy little book of High Grade Watches for sale for \$2.00 each. Write for it. We'll give you \$2.00 and interest on the \$2.00. SEND NO MONEY. WE'LL PAY YOU UNTIL YOU GET IT.
Desired Perfume Co., Inc. 11, Woodboro, N.J.

Truck Crops

By GILBERT S. WATTS

IN a season such as this large reserves of moisture in the soil are almost like money in the bank. One field of tomatoes, on land that is not equipped for irrigation, is turning off a profitable crop. It was plowed in March and harrowed at intervals until planting time. Another patch of an acre was put in following rye that was plowed late, after a heavy growth had been attained. Here we were forced to irrigate repeatedly to get good growth. Incidentally we would not have risked letting the rye grow so large if water had not been available.

VIRGINIA Blight Resistant Savoy spinach is the only variety of this crop which it is worth while to plant for fall use or sale in many sections. The sorts commonly grown in the spring very frequently blight or turn yellow in the fall.

The spinach crop will be slower to shoot to seed and of better market quality if not sown too thick. Weedy land should be avoided.

AS the season advances it becomes especially important to keep the celery well sprayed. It is practically impossible to store diseased celery without serious losses. Bordeaux mixture, 3-5-50 formula, should be applied weekly.

THE weeder attachment that has been used on the riding cultivator in both potatoes and corn has paid for itself dozens of times. Of course the large weeders are the thing for large fields but the device mentioned is wonderfully handy on the market garden where relatively small, succession plantings are the rule. It can be attached or removed in two or three minutes.

Club Root in Cabbage

Would like to have some information concerning club root in my cabbage. I used 4-8-7 fertilizer in the hill. Would this have anything concerning or causing the club root?
Morgan Co. W. Va. Chas E. Wolford.

THE fertilizer you used in the hill when planting your cabbage was in no way responsible for the club root that has appeared.

Next year grow your plants in soil where cabbage or related crops have not been grown for a great many years. Plant on a field that has not been in cabbage for five or more years. Lime well before planting.

Never feed diseased cabbage to livestock. Club root in particular often is spread in the manure as a result.

Endive

Please send cultural directions for endive. Mrs. E. R. M.
Luzerne county, Pa.
ENDIVE is a cool season crop and thrives best when planted in mid-summer for fall use. When planted in the spring in our climate it is quite likely to go to seed.

Sow in the same manner as lettuce in a rich soil that is retentive of moisture. Thin the young plants so that they are spaced about a foot apart in the row.

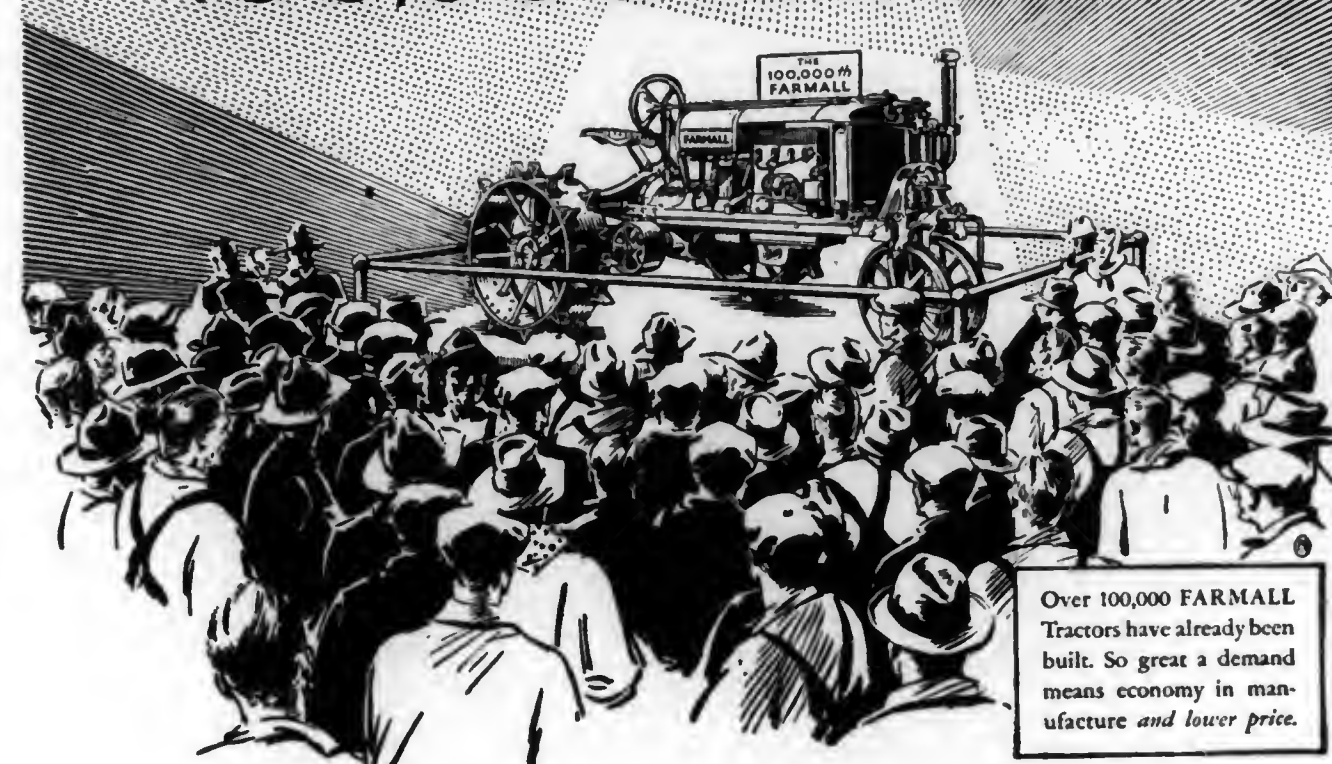
When a good size has been attained gather the leaves up in an erect position and tie with coarse twine, braid or a rubber band. In a week or ten days the hearts should be blanched to a light cream color.

Tomatoes Rot

My tomatoes are rotting before they are fully ripe. Now the green ones are starting to rot. Is it the dry weather, or is there some other cause?
Butler Co., Pa. T. C. Reichard.

WITHOUT doubt your tomatoes are affected by "blossom end rot." This trouble is brought on by dry weather. Unfortunately nothing can be done unless you are so fortunate as to be able to apply water.

100,000 FARMALLS



Over 100,000 FARMALL Tractors have already been built. So great a demand means economy in manufacture and lower price.

Price Reduced on FARMALL Tractors!

We have an important piece of news for power farmers throughout the United States—the price of the McCormick-Deering FARMALL has been cut \$50.

We are glad to be able to make such an announcement about the FARMALL at this time because right now the farmer is seriously in need of anything that will help him to cut down his costs of crop production. The reduction in price will be welcomed in every section.

Due to manufacturing economies and anticipated reductions in material costs, we were able to reduce prices on the McCormick-Deering implement lines, effective for the present season.

Recently, by the same process, we lowered the price on the 10-20 McCormick-Deering tractor \$40, and cut the 15-30 tractor price \$75.

Now, to complete our program of reductions, we announce a \$50 cut in the FARMALL price.

These reductions, made during recent months, mean a saving to farmers of millions of dollars.

As the original all-purpose tractor the McCormick-Deering FARMALL has won tremendous popularity. More than 100,000 FARMALLS have been built. Already this tractor has created a real revolution in farming. It is the best investment you can make today.

The new price is the lowest ever placed on the FARMALL.

You have probably seen the FARMALL Tractor at work. If not, your McCormick-Deering dealer will demonstrate it at any time, on any job. The FARMALL replaces 6 to 10 horses and 2 to 3 men. It plows 7 to 9 acres a day... double disks 18 to 25 acres... drills up to 45 acres... plants 24 to 46 acres... cultivates 33 to 50 acres and, in later cultivations, 50 to 65 acres. It handles every farm power job, including row-crop operations. See your dealer now. Put the best tractor power to work—at the new FARMALL price!

INTERNATIONAL HARVESTER COMPANY
606 So. Michigan Ave. of America Chicago, Illinois
(Incorporated)
Branches at Pittsburgh, Harrisburg, Philadelphia, Pa., and at 98 other points in the United States.

McCormick-Deering FARMALL

If It Isn't a McCORMICK-DEERING It Isn't a FARMALL

LIME - ALBA - LIME -
QUICK ACTING
ALL AVAILABLE
FINE AS FLOUR
LOW COST
WRITE FOR GUARANTEED DELIVERED PRICES TO...
ALBA MARL LIME COMPANY, CHARLES TOWN, W. VA.

Run My Oil Agency
In Split Profits with You
No Investment Needed
I want to place my Cen-Pe-Co Oil Agency with an ambitious, energetic man in your locality. I'll make this man my partner, furnish everything, and divide the profits 50-50 every week. In this business you can make \$50 to \$100 a week.
Johnson, Pa., made \$839 first three months. Bodine, Ohio, built her home from profits. You can do as well with full part-time. No experience needed. I'll show you how. Everybody buys oil. You simply take orders on long credit terms for nationally known Cen-Pe-Co Motor Oil. We deliver from nearby warehouse and collect. Pay you every week. Write Quick! I want to place my oil agency with you. I'll make this man my partner, furnish everything, and divide the profits 50-50 every week. In this business you can make \$50 to \$100 a week.
P. T. WEBSTER, General Manager
Central Petroleum Co., 100 CLEVELAND, OHIO

The PERFECT CORN HARVESTER
Sold Direct \$23.75 JUST NOTHING TO SHOCK or SILENT CUTTING
Works in any kind of soil. Cuts stalks, doesn't pull them. Cuts 4 to 7 acres a day with one man and horse. Great labor saver. Sold direct to farmers. Get your catalog NOW—be prepared. Write: LOVE MANUFACTURING CO., Dept 206 Lincoln, Illinois

Read the Advertisements

Advertisements give you a high point of view without any climbing at all. They spread world products before you—servants to serve you, conveniences to please—prices low because so many thousands are using the same. They give you a new conception of what you'd like to own. No longer will a watch or food chopper do—but the highest improved watch or food chopper. No longer just a radio—but one of purest transmission. They make you change your mind about what you started to choose, and choose something more pleasing at no higher price. They help you see the whole field of satisfying wares. They lift you to fresh joys.

Plant Maule Bulbs

You can have gorgeous Maule bulbs this fall. Low cost. Little effort. Tulips, Hyacinths, Narcissus, Crocus and many others. Write for Bulb Book today—FREE.
W. H. MAULE
423 Maule Building
PHILADELPHIA, PA.

HAYBALERS

Built for Capacity
and turn out neat bales of hay or straw. This is a money maker. Write for description and price. Bulletin 1130
A. B. FARQUHAR CO., Limited, Box 1146, York, Pa.

THE YOUNG PEOPLE

Feathered Police of the Farm

By JEAN BROOKS GUTHRIE

FLYING patrols are an innovation in the city. They are ages old on the farm. Birds, winged guards of the country, are one of Dame Nature's most valuable and delightful gifts to man, but too often what thanks do we give her?

In his ever increasing need for tillable land, man has upturned the natural thickets of wild grapes, berries and cherries, and when birds with a taste for fruit are thwarted here it is not to be wondered at that they become somewhat of a pest in the orchard, where they find the cultivated varieties of fruit quite acceptable. To avoid this trouble, give them a substitute. Elderberries, red haws, wild grapes, mountain ash berries, mulberries or choke cherries will draw many from the cultivated varieties, and they may be planted along fences or as a screen for out buildings where they will be ornamental and also provide food and shelter for many birds.

Surely in return for the warfare they wage for us unasked, we should be willing to give to the robin, woodpecker and waxwing some cherries, to the catbird some berries and to the grosbeak a few garden peas.

Outfitted by Mother Nature

To recognize the kinds of birds and to know which are particularly valuable and why they are so, is to understand this gift of nature to mankind better.

On police duty in the weed patch and maintaining their beats over the grain fields we find the sparrow, finch, mourning dove, cowbird, meadowlark, dickcissel and quail. Many of these birds are outfitted by nature with particular varieties of bills, tails, wings and feet especially adapted to their needs. Many of the seed eaters,



for example, may be recognized by their sparrow-like beaks. Such birds are present on the farm in large numbers and play an important part in the destruction of noxious weed seed. It has been estimated that the tree sparrow in one state alone eats between eight and nine hundred tons of weed seed annually. It staggers one to consider the acres of land that these weeds would cover and the havoc they would wreak with valuable vegetation if they were not destroyed.

Another division of our bird patrol stalks insect marauders. While not all insects are harmful and we would object to seeing ground beetles, honey bees and certain varieties of flies eaten in large numbers, we quite approve of the weakness of some birds for grasshoppers, plant lice, chinch bugs and caterpillars. Many that are normally seed or fresh fruit eaters will destroy many insects in nesting season when they give their young an almost pure insect diet.

Let's Look After Them

The nuthatch, house wren, yellow warbler and swallow are confirmed insect eaters, while a great proportion of the diet of the common blackbird, oriole, meadowlark and cowbird consist of caterpillars, grasshoppers, canker worms and other noxious insects. Scores of other bird friends, equally common on the farm, aid in the destruction of these pests.

The most formidable members of the aerial police are the rodent eaters, birds with curved claws and strong hooked beaks for tearing flesh and

capturing and holding their prey. Of these the hawks and owls aid agriculture the most. The great horned owl, the little screech owl, the short-eared owl and the butcher bird or shrike between them destroy swarms of mice, rats, gophers and ground squirrels.

If you would understand and fully enjoy these feathered friends, give them shelter, food and water about your home. If they are to nest close at hand next spring they must be encouraged to seek the farm during next winter's snow storms. Lay your hospitality campaign now. A feeding trough or shelf planned for a nearby tree or an outside window ledge will attract many winter visitors and will prove a never failing source of interest.



est. Nuthatches, chickadees, titmice, blue jays and downy and hairy woodpeckers will be readily attracted by chopped meat and suet, while tree sparrows, juncos and cardinals are inordinately fond of crumbs and seeds. If warmed water is set out at certain hours each day in cold weather, the birds will learn to look for it then and will use it before it freezes.

The "dog days" of August seem a far cry from the blizzards of January, but the plans we make this summer and carry out next winter should stock our farms with flying bird guards who will next year give little rest to insect pests among our crops.

Cooks—Take Notice

ANATIONAL Canning Contest, under the direction of the Household Science Institute, in which Four-H Club girls may compete for \$2,295 in cash prizes, cups, silver and bronze medals, is announced by the National Committee on Boys' and



Drawn by Marie Albertson, Penn'a



A SCHOOL RECORD

Margaret Platt of New Jersey attended school nine years without missing a day or being late. Margaret is fifteen years old.

Girls' Club Work, Chicago, Illinois.

A cash award of \$500 is being offered for the best single entry in either of the three classes of fruits, vegetables or meats. The best entry in each of these classes will win a \$100 prize, making a total of \$600 for the national prize winner. A total of 418 cash prizes will be paid in the three classes of the contest.

Special recognition will be given the two best entries from Four-H girls in each county represented in the contest. A French gray silver

finish medal will be awarded to the Four-H Club girl submitting the first prize jar from her county. The second high county individual will receive a bronze medal of honor.

Any club girl may enter the contest by simply sending her name and address, along with a statement that she is a Four-H Club member, to Grace Viall Gray, Secretary, National Canning Contest, Shenandoah, Iowa. By return mail she will receive free of charge the rules of the contest, entry labels, a standard glass jar and a book of general recipes. Entries in the contest must be made on or before October 1, 1930.

A SKINNING STUNT

WHO wants warm tomatoes for a salad? No one does, of course, but the old practice of loosening the skins by dipping the tomatoes in scalding water or turning them on a skewer over a flame heats them unnecessarily and requires a longer cooling time. Instead, hold the tomato in the left hand and quickly but firmly draw the dull edge of a paring knife over the whole surface. The skin will easily slip off and the tomato will be cool and ready to serve.

Jean Guthrie.

JUST KIDS

WE sent our ship a-sailing, Johnnie and Jimmie and me. We loaded it with precious jewels, And sent it out to sea.

Alas! Our good ship was plundered By unmerciful pirates three, But we took it all good-naturedly Johnnie and Jimmie and me;

For our ship was made of paper, And our precious jewels were pins, The sea was a tub of water, And we were all, "Just kids."

Submitted by Eleanor Haag, Pennsylvania.

Little Folks' Corner

The Housekeeping Adventures of Timmy Twitchet

By RUTH PLUMLY THOMPSON

(Continued from last week.)

Passing through the nursery one night Timmy noticed it, then he got in, just to see how it would feel. It felt so delicious that he turned the wheel. Whirr, wiz, out into the entry, into the sitting room shot Timmy so fast that his hat blew off and his tail blew straight out behind. Before he had presence of mind enough to put on the brake he had run violently into a footstool and plunged to the carpet. He got up slowly and rubbing his head advanced upon the find. "What a tone it would add to my establishment," said Timmy. "How shall I get it upstairs?" And I might as well tell you directly that it was the completest and most up-to-date toy automobile

you have ever seen or imagined.

For a long time Timmy sat thinking, then he ran off and got all of his friends. They were simply speechless when they saw Timmy sitting at the wheel of his car, and they were only too glad to assist him to the garage. It was worse than moving twenty pianos, but a step at a time they hoisted it up the stairs and at last it stood before Timmy's door. You have no idea how proud he was. Every one who had helped him to take a ride and at five o'clock, when they had all gone home, Timmy went to bed the happy possessor of a house and car. "You'll be more popular than ever, my dear fellow!" Bobby Grey had whispered as he took his leave, and I think Bobby is right. What do you suppose the children in the nursery thought next morning when their automobile could not be found? Oh, well, it is much better for Timmy to have it, for he can ride in it, and that is more than they can.

An Artist Speaks

AS we are Pennsylvania Farmer subscribers, I always read the Young People's Page. It interests me a great deal. I like to draw and the drawings always appeal to me. I have not been very active, but have eagerly followed the work of my fellow members.

This drawing which I am sending is one for the little ones to color. I graduated from high school this June and received numerous lovely gifts. I used this same drawing to put on my own individual "thank-you" cards. I tried many different color schemes, all of which were pretty. I hope, if you put it in, that the little people will enjoy coloring it as I did.

Elizabeth Chambers.

Pennsylvania.

PASSING EVENTS IN PICTURES



1. The Postoffice Department has inaugurated the use of fireproof mailbags in the air mail service. The new bag is slightly larger than the present pouch and is made of pure asbestos.

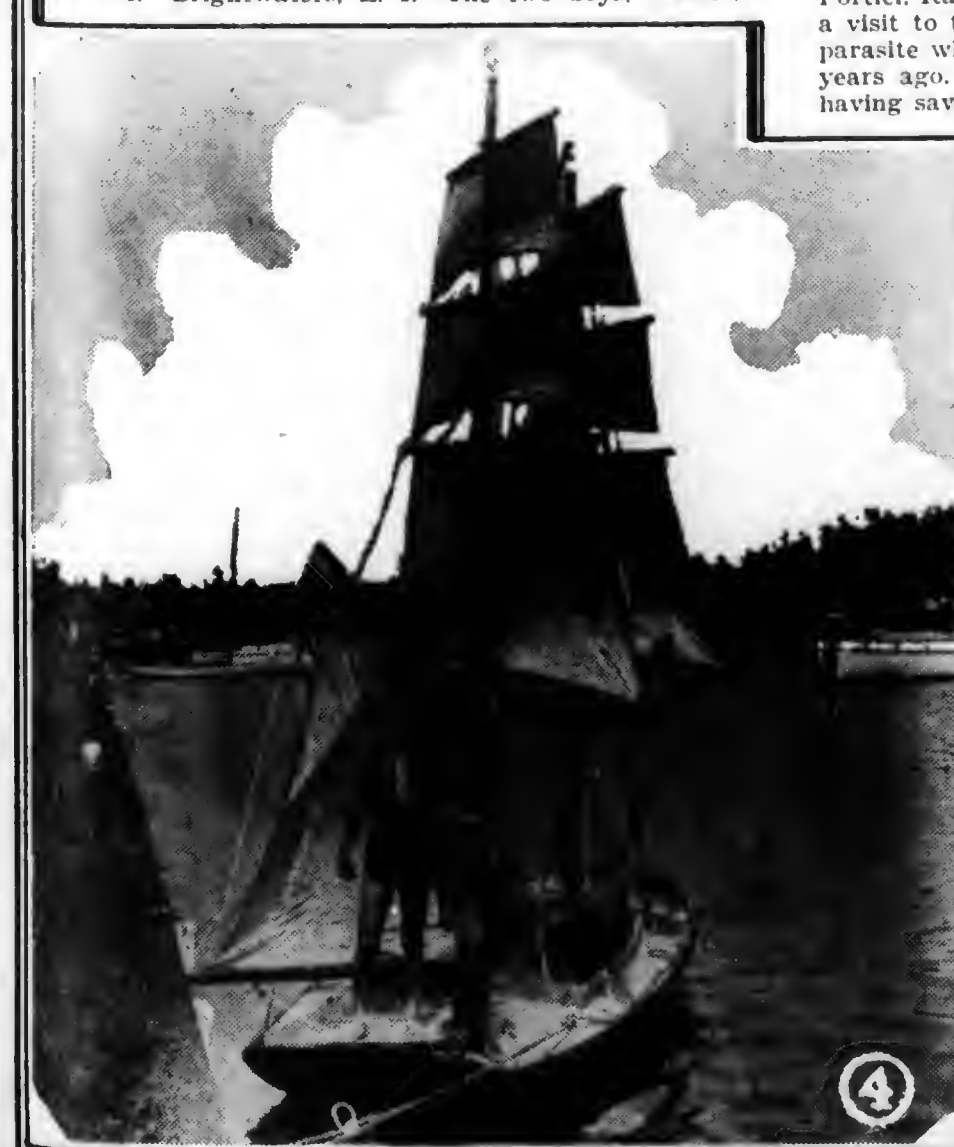
2. Colonel Charles A. Lindbergh was recently presented by President Hoover with a special medal commemorating his achievements in aviation. The medal was authorized by Congress in May, 1928 and is valued at \$1,500.

3. Catalina Island, Cal.—One of the landlocked bays of Catalina Island showing Pacific Coast Yachtsmen's craft gathered for the three-day Mid-Summer Festival.

4. Brightwaters, L. I.—The two boys, Walter,

13, and Jakob, 9, in the miniature full-rigged brig which they built of a 55-year-old boat which was originally constructed in Denmark.

5. Dr. Filippo Silvestri, noted entomologist of Portici, Italy, discoverer of the fruit fly, who plans a visit to the United States to study the fruit fly parasite which he isolated in western Africa some years ago. His subsequent work is recognized as having saved millions of dollars for fruit growers.



(Copyrighted by Underwood & Underwood)

The pool announced that its initial payment on this season's crop would be based on 60c a bushel for No. 1 northern at Ft. William. This means that a grower in Saskatchewan would receive an advance of only 40c on his No. 1 wheat (of which there is little) of 37c on No. 2, and ranging down to

The potato market showed a slight improvement during the early part of the week. One reason for the better feeling was the approach of the close of the New Jersey season. Shipments

Domestic Wool Quotations		
Grease Basis, Ohio and Similar		
64s,	70s, 80s (fine)	strictly combing 31 1/2
64s,	70s, 80s (fine)	French combing 23 1/2
58s,	60s, (1 1/2-blood)	strictly combing 26 1/2
58s,	60s, (1 1/2-blood)	French combing 26 1/2
56s,	60s, (1 1/2-blood)	clothing 23 1/2
56s,	(1 1/2-blood)	strictly combing 23 1/2
56s,	(1 1/2-blood)	clothing 23 1/2
48s,	50s, (1 1/2-blood)	strictly combing 30 1/2
48s,	50s, (1 1/2-blood)	clothing 27 1/2
46s,	low (1 1/2-blood)	strictly combing 27 1/2
		French combing 27 1/2

WEST WHOLESALE PRICES
 of radio bargains. New 1931 Screen
 all-electric, A. C. Sets in beautiful Con-
 also battery operated sets. Write today.
ALLIED RADIO CORPORATION
 W. LAKE ST. DEPT. 733 CHICAGO

A good strong well (the peach crotch well) on my farm gave us water to grow an abundance of tomatoes, cantaloupes, Lima beans and sweet corn when all gardens not watered were burned up by the hot sun and lack of water. We could not reach the potatoes and when we dug them the fertilizer came up as we had applied it, as there was no water to put it into solution and make plant food of it. We got a third of a crop. After all, the difference between a desert and the soil of Lancaster county, Pa., is *circuli water*.

is a feed that fits exactly into any program intended to bring about economical feeding. Diamond is an all-corn, high-protein concentrate—an inexpensive source of the nutrients that make milk and body tissue. Diamond, combined in the right proportion with your farm-grown grains, or with such feeds as bran, midds and hominy, makes up into a grain ration that will produce all the milk you'll want this Fall and Winter, as cheaply per pound as milk can be produced.



MFRS. ALSO OF BUFFALO CORN GLUTEN FEED

4% MILK

Big Milkers - Hardy Rustlers
Good Grazers - Perfect Udders

Write for Booklets
Ayrshire Breeders' Association
305 Center St. Brandon, Vt.

T. B. and Blood Tested
Two Hundred Holstein and Guernsey Springers for sale. Can be seen any day in pastures near our yards. 150 best Wisconsin cows in our Auctions every Tuesday. Every cow T.B. and blood tested to go anywhere.
WISCONSIN DAIRY CATTLE MARKET
Trevor, Wis.—On See Line
45 Miles S. W. of Milw., 58 miles N. W. Chicago

Reg. Guernsey Bulls.—1 to 12 mos. old, \$50.00 to \$150.00. Langwath Royal, Cavalier and Holstein breeding. Wanted, 4 bred heifers.
A. M. Kennel, R. 2, Honey Brook, Pa.

AYRSHIRE CATTLE of the best blood lines. Herd T. D. Accredited. Animals of both sex and all ages.
Geo. B. McCnelli, Wellington, Ohio

GOATS. Thoroughbreds, from world's best heaviest milkers, Calif. Giant Nubians, Toggenburgs. \$50.00 each, 3 for \$100.00. Goldsbroughs Goatery, Mohnton, Pa.

they keep you to the fore of modern life. Through advertisements you've laid down the shovel and the hoe. You can buy a whole harvest ready-to-eat in cans. You've hung up the fiddle and the bow, for a radio. There's little old-time work left in this age of amazing short-cuts. Read the advertisements carefully and when answering them, say you saw their ad in Pennsylvania Farmer.



Capacity-Power-Dependability-Uniformity

HAVE you...like thousands of others...been short-changed by so-called "bargain batteries" of unknown manufacture and then been keenly disappointed with poor results?

If you wish to really economize on batteries for radio, ignition and flashlight... buy Burgess Batteries. They satisfy!

You'll recognize Burgess Batteries by their black and white stripes, with the red medallion.

BURGESS BATTERY COMPANY
111 W. Monroe St., CHICAGO

BURGESS

When writing advertisers please mention Pennsylvania Farmer

This Year-Roof for All Time
with
Channelrain
ROOFING

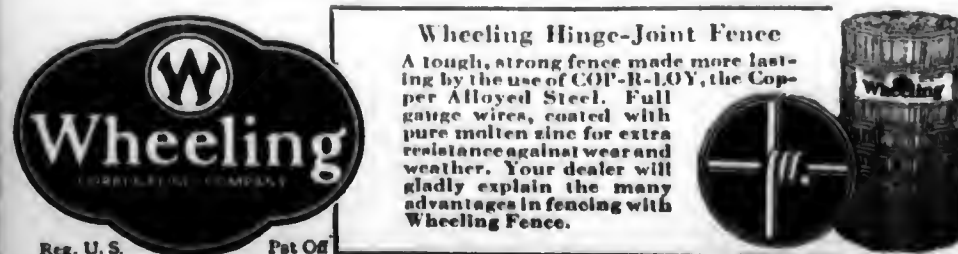


COP-R-LOY

THE COPPER ALLOYED STEEL

Protection first! Your investment in a roof is a poor one unless you are sure of three things—safety from lightning, watertight protection and permanence. Channelrain Roofing is now made of genuine COP-R-LOY, the long-life copper alloyed steel, and offers two-fold insurance of real performance. It not only resists rust and corrosion, but has the patented drain channel that makes it supremely efficient. Ask your dealer to show you the principle—it's simple—positive in results and lasting in service. See the dealer nearest you and save in transportation.

WHEELING CORRUGATING COMPANY, Wheeling, West Virginia
Branches: New York Buffalo Philadelphia Chicago Kansas City St. Louis
Richmond Chattanooga Minneapolis Des Moines Detroit Columbus, Ohio



Wheeling Hinge-Joint Fence
A tough, strong fence made more lasting by the use of COP-R-LOY, the Copper Alloyed Steel. Full gauge wires, coated with pure molten zinc for extra resistance against wear and weather. Your dealer will gladly explain the many advantages in fencing with Wheeling Fence.

What Our Readers Say

You Can't Trust Them

MY neighbor, Henry C. James, is a member of the Potter County Ayrshire Bull Association and has for his use a very valuable proved sire 11 years old. The bull has torn his nose out, so he has no ring (that should have put Henry on his guard), but the daughters of the bull are so valuable that Henry decided to take a chance and handle the bull with a rope around his neck.

That worked so nicely that Henry got into the habit of walking ahead of Mr. Bull when leading him out into the orchard to be staked out. Some time ago Henry started to lead Mr. Bull back to the barn, walking in front as usual. Without one snort, one bellow or any kind of warning Henry was tossed from behind and in the wink of an eye was under the bull's feet being trampled and Mr. Bull doing his best to gore with his sawed-off horns.

Donald James, a boy in his early teens, was playing near by with a tool half hammer, half wedge weighing six to eight pounds. He saw the plight his father was in and attacked the bull. Two blows conquered that bull so that the boy helped his father to the house then drove the bull unresisting and peaceable into the barn and tied him up.

I was born in the ox-team age more

than 77 years ago. I commenced driving oxen at about ten years of age and I used oxen more or less for 25 years. When two oxen come together they fight for the mastery to a finish. Never knew of a social fight.

When I turned dairyman I used that fact in handling my bulls. The rule of the farm was kill or conquer the very first time I had any trouble with a bull. If he curved his neck, run out his tongue or even snuffed when I came near him there was trouble and we settled it once and for all. I never had to have the second fight. I owned and handled seven aged bulls, led or handled them with a strap or rope. It put the fear of man into them so any man could handle them.

My motto was, "A dead bull makes beef, but a dead man doesn't ever make fertilizer—they bury him too deep."

Is that treatment cruel? You will probably say, "Yes. Better build a bull pen and keep him in it."

For thousands of years cattle have lived in herds. It is now intended to herd together. A bull pen violates that instinct. It's the surest way to make a bull crazy and an outlaw. I have handled two such. I treated them to the club, then tied them in a stall next the cows. Fed them almost entirely on roughage. Got them thin and hungry and handled them safely.

H. H. Hall.

Fighting Insects Fifty Years Ago

(Continued from page 5.)

sea, hearing the plight of the American wheat grower, decided to send to friends in the United States seed wheat from a variety which thrived in the Mediterranean countries.

Peter C. Shenk, of Pennington, New Jersey, was one of these friends who received three bushels of Mediterranean wheat. The wheat was carefully propagated and after several years of observation Mr. Shenk reached the conclusion that the variety was almost fly-proof. This aroused great interest and presently, farmers throughout eastern Pennsylvania were seeding Mediterranean wheat. Mr. Eastburn Reeder, a member of the Pennsylvania Board of Agriculture, reported in 1880 that his grandfather was one of the first to seed this wheat in Pennsylvania, the date being 1837. "It has stood the test of over 40 years and is yet largely sown, but is gradually being supplanted by Clawson and other more productive varieties," Mr. Reeder said at that time.

Conservation of Birds

Not until the last quarter of the nineteenth century was the practice of late fall seeding to control Hessian fly damages accepted to any great extent by farmers. Mr. Rathvon said in his report of 1877 that "late sowing is the safest and surest remedy. We have been recommending this preventive remedy for the past ten years or more, but it is only within the last two or three years that it has received any respectable hearing or heeding, and only at a recent meeting of our local Society in Lancaster county was there manifested anything like a unanimous opinion that this course should be universally pursued to circumvent the ravages of the fly.... Few doubt its value because of the possibility of late ripening next spring, and the grain falling prey to midge and weevil. This was overcome, however, by liming the wheat late in the fall so that plants would be stimulated and thus make up for the lateness in planting."

Such examples as the potato grower's battle with the Colorado beetle and the wheat grower's fight with the Hessian fly afford excellent illustrations of how destructive insects have been in no small way responsible

for the general acceptance of some improved agricultural methods which might otherwise have been delayed for a generation.

Another movement of far reaching importance which was at least stimulated by the ravages of insects to farm crops was the conservation of wild life, particularly birds. In January, 1879, the Pennsylvania State Agricultural Society, after receiving so many reports of the great losses resulting from insects, appointed a committee to investigate the probability of increasing the destruction of injurious insects by further limiting the killing of insectivorous birds. This action was prompted by the wholesale destruction of valuable birds in all parts of the country.

And Now the License

It was the custom in some parts of the East 50 to 100 years ago to hold community shooting matches. After choosing sides, each party endeavored to exceed the other in killing the greatest number of birds and other wild animals within a radius of several miles of the community center. In Massachusetts birds were killed in such quantities in these contests that cartloads were sold to farmers for fertilizing purposes. Another custom which resulted in the depletion of many valuable birds was the wearing of birds as ornaments. There is a record of a single sale in London where 15,574 humming birds and thousands of other birds were sold for the sole purpose of decorating ladies' hats.

After a lengthy report pointing out the great value of game birds in limiting the loss from insects, the committee recommended a change in the Pennsylvania law in order to shorten the season for killing of game birds, and then made this very significant observation: "The laws of England provide game keepers whose duty it is to issue permits to persons wishing to hunt. While we are not prepared to recommend a law of this kind, we believe the time is not far off when our state will have to provide it." Developments during recent decades have shown the wisdom of this prophecy.

Seed Bed Preparation

(Continued from page 8.)

fine shape. "On oats or corn stubble it will go five to five and a half inches deep. A week or so ago I visited J. H. Fulmer, Northampton county, Pa., and he was preparing a seed bed for alfalfa following wheat with one of these harrows, pulled with a 15-30 tractor. This harrow can be secured in sections of various widths to fit the usual sizes of two and three plow tractors commonly used through this territory. Mr. Fulmer ran the harrow both ways and was preparing a seed bed at the rate of 20 acres per day. That makes a cheap but good seed bed when rolled.

With a sod plowing is essential. Plowing is expensive and there are ways out of preparing a seed bed cheaper but just as good as plowing it appears.

For years the wheat farmer of the West has used what is called a field cultivator. It is used to follow or keep down weeds during one season on half the land while the other half is in wheat. These field cultivators have two wheels similar to a dump rake. The teeth are made of spring steel similar to the spring-tooth harrow mentioned above. The manufacturers say that these tools are being sold by the hundreds in New York state. This field cultivator is in reality a wheel mounted spring-tooth harrow. It has a power lift similar to a tractor plow and can be adjusted for depth.

We tried one of these tools, this spring, on last year's potato field. There was no difficulty in making a seed bed five and one-half to six inches deep which I believe would be ample for corn.

California Chisel and Disk

Some potato growers are employing the chisel and cover crop disk for seed bed preparation for potatoes. This system seems to work all right on soy beans if chiseled in the fall after frost, again in the spring followed by disk and chisel again at planting time.

For sweet clover or other sod no doubt plowing is the best system, then follow with the disk and chisel. With tractor power and the spring tooth equipment mentioned above, no doubt making of the seed bed can be cheapened greatly over plowing with equal results.

To Stop Cistern Leaks

If the cistern leaks, it is usually a waste of time and money to draw out the water and wash the surface with a cement wash or grouting of water and cement mixed to a cream-like consistency. Such a wash will usually open up cracks directly over the old fine cracks and the cistern will leak as much as ever. However, if the cistern is carefully replastered, it usually will stop any leaks.

A simpler and cheaper solution is to paint the inside of the cistern with two coats of a water-emulsified asphalt, which contains no oil and is claimed not to make the water taste or smell. Such a material is now on the market.

I. W. D.

Fertility from a Desert

(Continued from page 8.)

note from any other community. Housing, water, food, everything must be brought to it and distributed to the thousands of inhabitants. All this work is in the hands of the company, which employs experts in all lines affecting the community, including welfare workers and teachers.

A lone grave is seen now and then as we motor over the plains, marked by a mound of earth or stones and faded flowers. These humble monuments will probably endure in this changing climate as long as greater monuments in humid regions. For the great works thrown up on this plain by the Peruvian army in 1879 look as if they had been made a week or a month ago.

CUT THE COST OF TRACTOR OPERATION WITH AMERICAN GAS



IT'S not only because ORANGE AMERICAN GAS allows you to cover more ground for every gallon you use. That's only one way in which this efficient, powerful gas saves you money.

There's the additional saving which comes from the better, smoother operation of your motor—the reduction of repair bills—the better speed you can maintain all day when minutes saved bulk big!

ORANGE AMERICAN GAS is sold at the same price as ordinary gasolines—but there the difference begins. For this is a thoroughly tested gas—a gas which shows up better by laboratory tests—by road tests in automobiles—and by field tests in tractors. And to get the most out of your tractor—team up ORANGE AMERICAN GAS with AMOCO TRACTOR OIL—the "pullingest" combination you've ever seen at work!

Ask your nearest AMOCO dealer, call the closest branch or write us direct for further information.

The AMERICAN OIL COMPANY
Affiliated with Pan American Petroleum & Transport Company
General Offices: American Building, Baltimore, Md.



Farm homes that are castles

You can tell the farm home which is a castle in the proper sense of the word. Not a mansion to be sure. But always imposing, impressive. Large, sunshiny rooms in the midst of broad acres and open fields. Expansive of ground, fresh country air. Neat trimmings and landscaping which add dignity to the house.

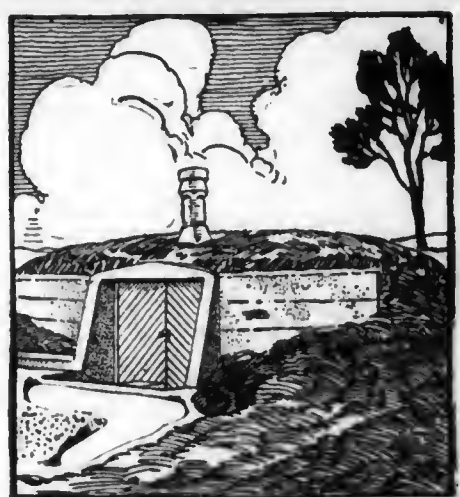
You know before you enter that the owner has a certain soundness of thinking usually called business sense. Always on guard against waste. And usually the housewife tells you that thrift—care and scrutiny at the time of buying—bought those extras which make the inside seem so complete. For, she adds, they read the advertisements.

It pays to read advertising

Reading the advertisements tells you what to buy and how to get most value for every penny spent. A dozen needs arise on your farm every week. Knowing which machine which tools, which automobile, which suite of furniture, which cooking fuel is the best for the price you pay, will save money otherwise thrown away. Perhaps as little as twenty-five cents a week—perhaps a hundred dollars a single purchase.

You can beautify your home—make a real castle out of it—with money saved in buying advertised goods. When you buy merchandise advertised by name, you get purchase value in the greatest degree from every dollar spent.

FREE Plans for Apple and Potato Farm Storage



Concrete is the permanent building material to use in building your storage cellar or storage house.

Off season marketing, made possible by good storage, brings higher prices that soon return the cost of the concrete cellar.

Booklet Gives Plans and Instructions

Complete plans and construction details for any size storage cellar are given in our new booklet on farm storage.

Portland Cement Association
1315 Walnut St.
PHILADELPHIA

Please send me your free booklet on "Farm Storage for Fruit and Vegetables."

Name _____ State _____
St. Address (or R.F.D.) _____
City _____

CATTLE

BUCK & DOE RUN VALLEY FARMS
Hereford Cattle—Poland-China Hogs—Hampshire
Sheep—Draft Horses. THE SAINT AMOUR
COMPANY, Martinsburg, Penna.

Angus Cattle at reasonable prices.
Write **BAYARD BROS.**, Waynesburg, Pa.

TWO-YEAR-OLD REGISTERED SHORTHORN
BULL, T. H. tested, \$100.00. West Finley, Pa.
R. E. CARROLL

D. S. POLLED HEREFORDS—A fine selection.
Cows, heifers, bulls. Come or write.
CHAS. D. GILL, Millersport, Ohio

SHEEP

REGISTERED SHROPSHIRE
6 Rams, one and two-year-olds, 10 Ewes, one to three-year-olds, all of which are bred from outstanding rams. J. W. Burket & Son, Tyrone, Pa.

THIRTY REGISTERED SHROPSHIRE, one and two-year-old rams, bred by our imported rams. **HYLMEDE FARM**, Beaver, Pa.

SHROPSHIRE AND OXFORD RAMS for sale. Registry papers furnished. Priced reasonable. **BROCKETT FARMS**, Atwater, Ohio

Shropshire Rams and Ewes. Best quality and breeding at hard time prices. Start a flock now. Write me & be glad. **E. W. Wilcox, Crosby, Pa.**

REGISTERED HAMPSHIRE RAM LAMBS. Fine ones, ready for service. Price \$25.00. **MCCULLOUGH FARMS**, Newville, Pa.

For Sale Rams of heavy C Type. Delaine Merino. Sutton and Wool Combed. **Lee E. Scott & Sons**, Burgettstown, Pa.

Remember the Cheviots when placing your Mountain Dale Farms. H. T. Potter, Cora, Pa.

SECURE MAXIMUM PROFITS

Shorthorns - - The Farmer's Best Breed

"No breed of cattle will go into the feedlot for ten months and carry out more beef on four legs than the Shorthorns," said Henry Horstentien, feeder and exhibitor of International Champions.

Shorthorns excel in returning profit—both at the stall and on the meat block. 3,979 Shorthorn cows of all ages average 5,476.4 pounds of milk. Ten top records average 19,330.7 pounds milk.

Shorthorn calves make cheapest gains that return largest profits.

Learn more of this great breed. Write for free literature to **AMERICAN SHORTHORN BREEDERS' ASSOCIATION**, Chicago, Illinois

SWINE

EXCELLENT PURE-BRED BERKSHIRE sows, 4 mos. old, at wheat prices. **Furness, Pa.**

125 BIG TYPE, pedigree Chester Whites from big breeders and big litters. Priced right and shipped on approval. **O. E. Cassel, Hershey, Pa.**

QUALITY CHESTER WHITE spring boars and sows. Fox Terrier dogs. All stock sold C.O.D. on approval. **A. H. Crowner, Mt. Sterling, Ohio**

CHESTER WHITES—Big type Champion blood, with a record of heaviest C. White litter in state. **L. C. German & Son, Beech Creek, Pa.**

Feeding Pigs, 15 to 50 lbs. \$4.50 to \$5.00 according to size. Truck delivery on large lots. Mostly Poland-Chinas. **Stanley Short, Cheswald, Del.**

DUROCS—Reg. service boars; gilts and sows bred for late Sept. farrow. Spring and fall pigs. Write. **J. W. Williamson, Murfreesville, W. Va.**

Field Day at Morgantown

By W. D. ZINN

NOTWITHSTANDING the discouragements which are facing the farmers a goodly number of farmers coming from fifteen or twenty counties of the state met at Morgantown on August 13 to attend field day at the Experiment Farm.

In the variety oats test the Gopher oats seems to be taking the lead and the Station recommends it for West Virginia above all other varieties.

Considering the drouth the soy beans have made a wonderful growth and the Wilson seems to be taking the lead. It has been broadcasted and drilled in rows and a comparison will be made of both methods for hay and for seed. It is much cheaper for the state to do this than it would be for each farmer to test these things out for himself. Our Experiment Station can and will render a great service if farmers will only avail themselves of the information it has for them.

The Station recommends that soy beans be cut just as the bean begins to go. After feeding soy beans for more than twenty years I am satisfied that this is the best time to cut them.

Sweet Clover in Sour Soil

In the fertilizer test with corn it was shown that to put from 125 to 250 pounds of fertilizer along side of the hill gave better results than to put it under the hill or on top of the seed, and that application gave better results than to broadcast the fertilizer.

The Station is carrying on an experiment in developing a variety of sweet clover that will grow in a sour soil, but Dr. Garver told us that they had not gone far enough with this matter to say whether this can be done. Sweet clover is the best soil builder known to agriculture today and if a variety can be found that will grow in a sour soil the question of improving our thin land has been solved.

One of the treats which we all greatly enjoyed was a talk given by Mr. James Speed, editor of Southern Ruralist, Lexington, Ky. He quoted from the Diary of George Washington quite extensively and stated that Washington had counted the number of wheat grains in a bushel of wheat and then ascertained the number of square inches in an acre of ground. Having done this he stated that five pecks of wheat per acre was the amount that should be sowed.

A Visit to Gilmer County

TWO years ago I visited Gilmer and met several score of farmers at the court house. I was urged by the farmers if I ever came back to the county to visit relations I should send word ahead so a meeting could be announced. Gilmer county has been hard hit with the present drouth and I supposed that the farmers would be so disheartened that it would hardly be worth while to announce a meeting. In compliance with my promise I notified my nephew when I would be in Glenville, the county seat of the county.

I was never more surprised when I went into the court house to find that one hundred and twenty-five farmers had assembled with their coats off ready for business. I have never talked to a better set of listeners. The question they were most interested in was, what can we yet sow that will make feed for our livestock?

I have sown oats after the middle of August and have grown a very fine crop. These oats were sown for a cover crop in the potato ground and we made the mistake of leaving them on the ground. I now believe had I purchased commercial fertilizer with half the value of the oats I would have had better results. Oats like clover are worth too much to feed for any one to turn down.

FREE!
BOOKLET ON
"Farm Sanitation"
WRITE TODAY!

KRESO DIP NO. 1
Standardized

Germinates Parasites Disinfects

Kreso Dip No. 1, standardized, is a colorless product—non-irritating, effective, inexpensive. It is for use on horses, cattle, sheep, goats, dogs and poultry. It destroys lice, fleas, ticks and chicken mites. It drives away flies and mosquitoes. Kreso Dip No. 1 disinfects and cleanses and helps deodorize.

Purchase Kreso Dip No. 1 at Drug Store. When writing for "Farm Sanitation" booklet send Animal Industry Dept., Desk K-181.

PARKE, DAVIS & CO.
Detroit, Michigan • Walkerville, Ontario

Free BOOK
ON CARE OF YOUR DOG

A valuable, illustrated 164 page treatise—based upon over 50 years experience in the treatment and feeding of dogs. There is a special Dog Medicine for most conditions. Sold by dealers everywhere. Should they not have the particular medicine you need—obtain it at once by writing direct to us. For Free book write

GLOVER'S
Imperial
DOG MEDICINES
119 Fifth Avenue, New York, N.Y.

Get Rid of CANADA THISTLES
The Little Wonder Weed Exterminator will positively destroy them.

A spraying solution (not a chemical) costs only 50¢ per gallon; will not ruin the soil nor cause injury to plants. Write for free literature.

REBER CHEMICAL COMPANY
Reading, Pa.

185
To advertise your business, make new friends and increase your margin of profit, send for our new book, "How to Advertise Your Business." It contains a complete course in advertising, with a list of 100,000 advertisers. It is a perfect time-saver and fully guaranteed. It is a must for every business man. Write for it today. **CHICAGO WATCH & JEWELRY CO., CHICAGO, ILL.**

3,500 14-Week-Old S.C. White Leghorn PULLETS

Immediate September Delivery

The biggest buy of the season. Cheapest price ever. From our Special National Poultry Sale. Order at once, as these will be taken quickly.

PINE TREE HATCHERY
Box 7, STOCKTON, NEW JERSEY

CHICKS PURE BRED CASH OR C.O.D. \$1.00 PER 100. \$10.00 PER 1,000. \$100.00 PER 10,000. **MAINTENANCE**

Day Old Chicks—Pullets (Gibbs' Latest) Pedigreed up to 328 eggs. Baby Chicks, 10¢ each. Pullets, 15¢ each. Write for details. **Gibbs' Poultry Farm, Box 15, Versailles, Ohio**

ADVERTISING is the modern intelligencer. It keeps you informed, advises you of new things, suggests new uses for articles you already own, and prepares you today for wise and useful purchases tomorrow.

The Last Word In Feeds: EF-FISH-ENCY

STRUVEN'S FISH MEAL
FOR FISH, POULTRY & CATTLE FEED

EF-FISH-ENCY is the feed makes for EFFICIENCY. It is the feed which gives you the highest profit at the lowest feed cost.

STRUVEN'S FISH MEAL will make more profit for you than any Protein and Mineral supplement you can use in fish, poultry, and cattle ration.

Write TODAY for a sample and booklet—**CHAS. M. STRUVEN & CO.**
114-116 H. S. Frederick Street
Baltimore, Md.

GIBBS TRAPS ARE BEST

They hold what they CATCH—and add to your profit. They pay for you to use them. They pay for you to use them. They pay for you to use them.

Write for your free literature. **GIBBS TRAP CO., 100 N. 1st St., Philadelphia, Pa.**

QUICK RELIEF FOR RHEUMATISM

JAPANESE OIL

GET BEAUTIFUL ALL WOOL BLANKET

Send New blanket sent in trade for your old one. Amazing new plan. Satisfied customers everywhere. Write today.

VERMONT BLANKET COMPANY
P.O. Box 615, Burlington, Vermont

WE NEED

more new laid WHITE and BROWN EGGS direct from the farms. Write for shipping cards. If you order and experience our guarantee.

ZENITH-GODLEY CO.
Duane Street, New York City

PLEASE say: "I saw you"
adv. in Pennsylvania Farmer.

EDUCATIONAL

WANTED IMMEDIATELY, MEN—WOMEN, 18-35 years, for government jobs. \$125-\$250 monthly. Steady employment; paid vacations; comprehensive benefits. Thousands needed. Write for literature. **200, St. Louis, Mo.**

SITUATIONS

RESERVED COW-TESTER desires position in charge association or cream station. Address **100, Pennsylvania Farmer, Pittsburgh.**

HONEY

RABBITS

CHICKS

DUCKS

GOOSE

SWINE

CATTLE

HORSES

SHEEP

GOATS

PIGS

BIRDS

FISH

PLANTS

TOOLS

MACHINERY

VEGETABLES

FRUITS

GRAIN

SEEDS

Farm Conditions

Midlin Co., Central Pa.

Aug. 18: No rain from about the 13th of July till August 10th when we had a fine shower which helped growing crops a little for a few days. Since then had only a few light sprinkles. Much of the corn too dead to be helped, others would be helped much by a good rain. Farmers are busy filling silos, a number are done. Early potatoes did very well, but the late ones will be a poor crop. Wheat and oats yielded very good. **J. H. E.**

Blair Co., Central Pa.

Aug. 21: Our great drouth is broken, although things are still very dry. We had our first rain since July 6th on the 14th of August. It rained some all day and again the morning of the 15th. Some threshing done and grain turning out well. Pasture very scarce. Some silos are filled. Corn and potatoes badly damaged. **H. E. Hetrick.**

Lebanon Co., S. E. Pa.

Aug. 25: Long heat spell is broken. One and one-third inches of rain fell. Much ground too hard to plow for wheat. Country, excepting corn fields, is a desert. Many trees of all varieties have died. Reservoirs and springs have gone dry for first time on record. Walnuts more plentiful than for years. **Robt. I. Welger.**

JAMES AND DREW COMPANIES MERGE

The farming public will be interested in the purchase of the Drew Line Company by the James Manufacturing Company, and the merger of the two companies, as just announced to the public. Negotiations which have been under way for some time were recently completed. It is stated the Drew Line equipment for farm buildings will be manufactured by the James Manufacturing Company. The experienced personnel of the Drew Line, together with its sales organization including its dealers throughout the country goes with the James Manufacturing Company. It is expected many material benefits will result to the consumer, as well as to the industry, by this merger. The merged industry will be owned, operated and serviced by the James Manufacturing Company. Friends of the Drew Line products will be glad to learn the name and trade mark of this company will be continued, as well as the manufacture of its equipment. All sales and service for both the Jamesway and the Drew Line products will be handled by the James Manufacturing Company, as the result of this merger.

RADIO PROGRAM

A PROGRAM from the Inter-American conference on Agriculture and Forestry, which opens its sessions in Washington this week, will be broadcast in the National Farm and Home Hour on Monday, September 8. The complete program for the week follows:

Monday, September 8
Cotton Crop Report—W. F. Callender, chairman, Federal Crop Reporting Board. Program from the Inter-American Conference on Agriculture.

Tuesday, September 9
The Garden Calendar—W. R. Beattie, horticulturist.

The Forthright Agricultural Commodities Act and Your Business—F. G. Robb, principal agricultural economist, Bureau of Agricultural Economics.

Wednesday, September 10
Making Fall Pickles—Rowena Schmidt Carpenter, assistant to the chief, Bureau of Home Economics.

Thursday, September 11
General Crop Report—Federal Crop Reporting Board.

Friday, September 12
The Farm Business Library—M. S. Eisenhower, director of information, United States Department of Agriculture.

The Week with the Farm Board—Edgar Markham, assistant to the chairman.

(Second Farm Board speaker to be announced.)

CLASSIFIED DEPARTMENT

WANTS... 12c a word - - per insertion

Minimum charge \$1.20

10c per word per insertion when 4 or more consecutive insertions of the same copy are used.

Advertisements in these columns cover farms for sale or wanted, help or situations wanted, pets, hay, seeds, honey, used implements and machinery, in fact anything that the farmer wishes to buy, sell or exchange.

Cash must accompany order.

Count as one word, each initial, abbreviation and number, including name and address. All advertisements set in uniform style, no display type or illustrations.

Orders, discontinuances and change of copy must reach us Thursday, ten days previous to date of issue.

Mail your order and remittance to

PENNSYLVANIA FARMER 7301 Penn Avenue, Pittsburgh, Pa.

SEEDS AND NURSERY

SEED WHEAT—Grow 5 to 10 bushels more per acre. Same work. One bushel extra pays for seed. Lancaster County, Pennsylvania. Seedling, sound, disease-free, absolutely clean, carefully graded, heavy yielding. Smooth and bearded varieties. Less seed required. Also Northwest and genuine Grimm Alfalfa, Timothy, Ryegrass. Write today, folder, samples, prices and prices. **E. C. Livermore, Box 11, Honesdale, Pa.**

CERTIFIED WHEAT AND RYE—High-yielding, experiment station bred varieties, recommended for Eastern States. Write for descriptions and prices. **E. C. Livermore, Box 11, Honesdale, Pa.**

HARDY ALFALFA SEED 90% pure, \$3.80. Sweet Clover, 95% pure, \$3.50. All 60 lb. bushel. Return seed if not satisfied. **Geo. Bowman, Concordia, Kansas.**

CALIFORNIA PRIVET HEDGE PLANTS, 2 to 3 feet high. Extra line plants, \$2.50 per 100, \$20.00 per 1,000. Schwartz Nurseries, Lancaster, Pa.

CERTIFIED TRUMBULL SEED WHEAT. Highest test. Prices reasonable. **Dunlap & Son, Williamsport, Ohio.**

SELECTED POOL and Trumbull seed wheat. Return seed if not satisfied. **Geo. Bowman, Concordia, Kansas.**

BABY CHICKS

MARTIN'S CHICKS—Nose better, barred, Rhode Island, Red, Buff Orpingtons, White Wyandottes, 10c. Brahmas, Giants, 15c. Also Buff Leghorns, Anconas, Se. Heavy Mixed 9c. Light Mixed, 7c. 100% delivery, postpaid. **Martin's Hatchery, Mt. Victory, Ohio.**

CHICKS C. O. D.—100 Rocks or Reds, \$9.00; 100 Darks, \$7.50; heavy mixed, \$8.00; light, \$7.50. Delivery guaranteed. Feeding system, raising 95% to maturity, free. **C. M. Lauver, Box 25, Millersport, Pa.**

POULTRY

FOR SALE—Hundreds of extra choice, large type English Bred S. C. White Leghorn Yearlings, \$1.00 each. Shipments approx. Catalog free. **Hillview Poultry Farm, Zealand, Mich.**

6,000 TREXLER WHITE LEGHORN PULLETS Bred on free range, disease free, from our own selected breeders. **Trexler Farms, Allentown, Pa.**

ENGLISH WHITE LEGHORNS—Pullets and Cockerels. **Elmer Whistler, Newville, Pa.**

HIGH PRODUCING WHITE LEGHORN PULLETS, 10 weeks, \$1.00. **J. C. McCoy, Jr., Elmira, Pa.**

CORN HARVESTER

RICH MAN'S CORN HARVESTER, poor man's price—only \$25.00 with bundle tying attachment. Free catalog showing pictures of harvesters. **Process Co., Salina, Kansas.**

HAY AND GRAIN

FOR SALE—Alfalfa, Timothy, Clover Mixed. Delivered prices quoted. Write us. **John Devlin Hay Co., 102 North Clark Street, Chicago, Ill.**

PATENTS

POTATOES ACCEPTABLE in payment for Registered Patent. Write for particulars. **Sterling Buck, P.O. Box 1, Washington, D. C.**

LADDERS

EXTENSION LADDERS, 10 to 60 feet. Descriptive circulars, prepaid freight prices, prompt service. **Fre. Patton, Jewett, Ohio.**

DOGS

ENGLISH SETTER PUPPIES, healthy, vigorous. All papers for registry. **S. C. Morgan, Cambridgeburg, Ind.**

ENGLISH BUILDING PUPS, males, satisfaction or money refunded. **Frank Makley, Covington, La.**

In the Pennsylvania Farmer are Names—names of advertised products. Time and again you see them. They are like old friends—to be trusted. Their names mean economy, full value and integrity.

Tell the manufacturer you saw their ad in Pennsylvania Farmer.

Don't try to re-work or use old explosives.

Dynamite THAT HAS GONE BAD IS DANGEROUS TO WORK WITH

Don't try to dry it out in a stove. It is dangerous.

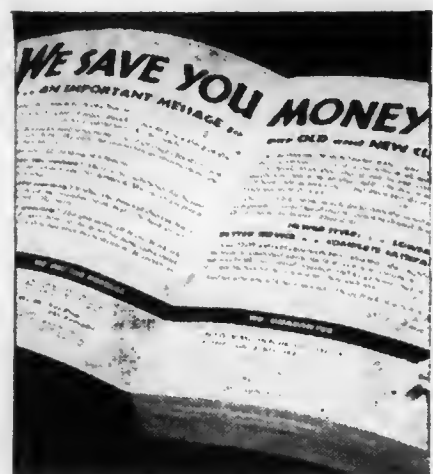
IF YOU HAVE MUCH OF IT, CONSULT EITHER THE FIRM THAT MADE IT OR YOUR AGRICULTURAL COLLEGE

WILLIE DYNAMITE'S GONE TO THE BAD. I KNOW; AND GETTING AWFUL TOGETHER. YOU DON'T KNOW WHEN HE'S GONNA BLOW UP OVER SOMETHING.

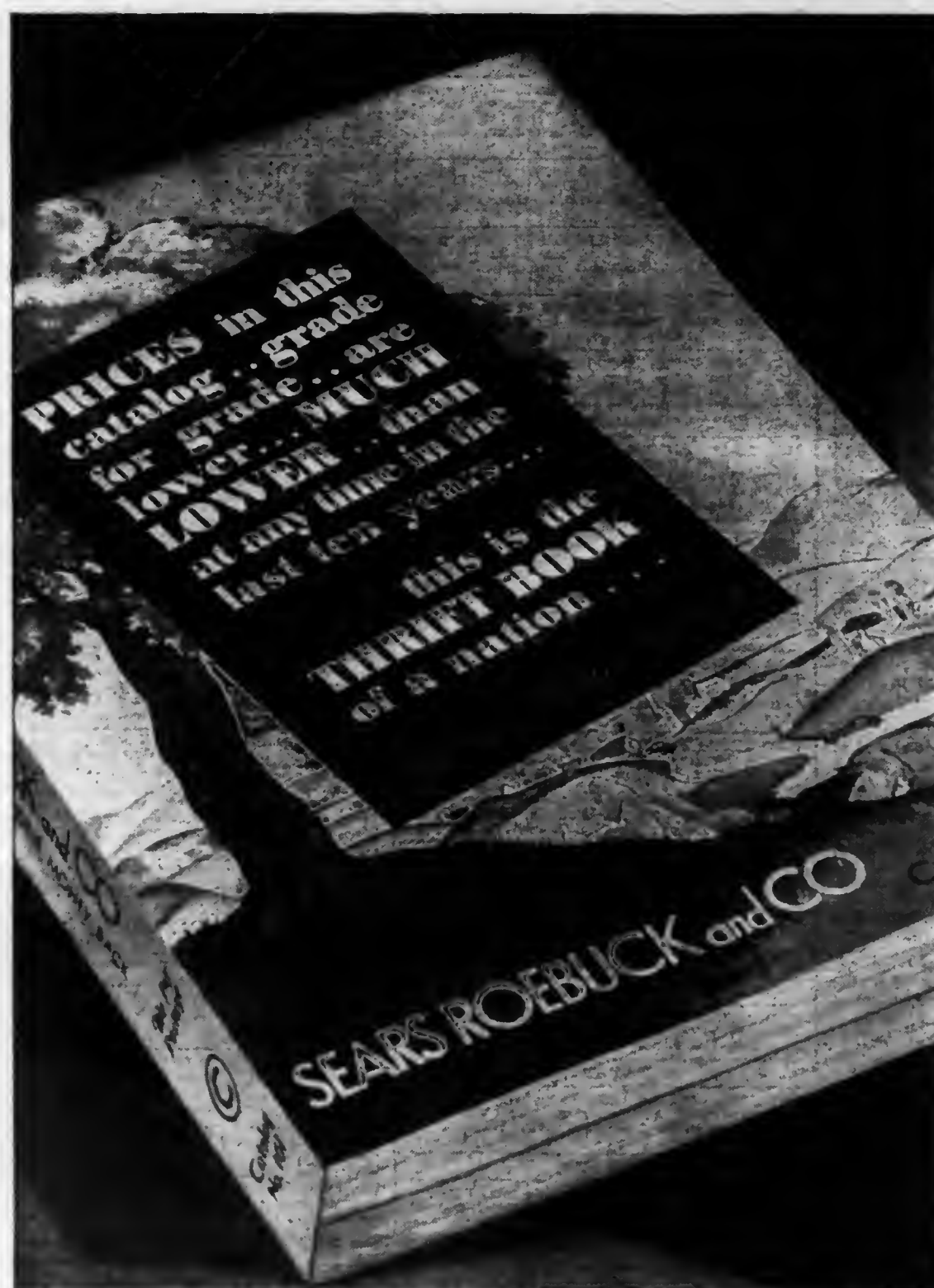
SOMEBOY BOMB YOUR PLACE? NOPE, I PUT SOME DYNAMITE IN THE STOVE TO DRY—AN MY WIFE CAME ALONG AND TRIED TO BASTE IT.

SINCE WHEN HAS ZEPH BEEN RUNNING AROUND WITH A WOODEN LAIG? SINCE HE TOOK A KICK AT A MULE WHAT HAD JUST EAT SOME STICKS O' OLD DYNAMITE ZEPH HAD LYIN AROUND.

ADVERTISING is the modern intelligencer. It keeps you informed, advises you of new things, suggests new uses for articles you already own, and prepares you today for wise and useful purchases tomorrow.



**12,000,000 shoppers
know *where to find the*
LOWEST PRICES
IN 10 YEARS....**



SEND FOR THIS FREE BOOK

This new catalog, with its 1,000 pages of new merchandise, all at the lowest prices in ten years, is yours for the asking. Whether you intend buying from Sears or not, you will want this book to know what prices you should pay. You do not obligate yourself in any way in filling in the coupon. The book is free. Send today.

SEARS ROEBUCK and CO

Sears, Roebuck and Co.—The World's Largest Store—presents the new "Thrift Book of a Nation." From cover to cover it tells a story of value without precedent.

Lowest Prices in 10 Years is not a slogan. It is a promise. And lowest prices are here coupled with the most advanced merchandise to be offered this season.

Smart Style at a Low Cost

If you are interested in wearing apparel, you will find this new catalog abreast of the times. Not alone that, but you will learn Sears-Roebuck buys for less and sells for less. You and your family can have more and better clothing if you will use this Thrift Book.

Economy for Your Home

Here we have exerted the full force of our buying and engineering ability to bring you all of the better things for the home at prices we alone can offer.

Whenever you are going to buy for your home, look in your Sears catalog first.

**46,000 Articles—Every One
Bargain Priced—The Largest
Variety of Merchandise
Offered by Any Store**

Whatever you want for yourself, your family, your home, your car, your shop, your farm will be found here in this new "Thrift Book of a Nation" for Fall 1930.

Use it often. Compare prices. Compare quality. Remember, we guarantee satisfaction and we guarantee a saving—on every purchase.

SEARS, ROEBUCK AND CO.

Chicago, Philadelphia, Boston, Minneapolis, Kansas City,
Atlanta, Memphis, Dallas, Los Angeles, Seattle.
(Mail Coupon to Store Nearest You)

Send me your Latest General Catalog.

Name.....

Postoffice.....State.....

Rural Route.....Box No.....
(Please give both Route and Box Number if on a Rural Route)

Street Address.....

PENNSYLVANIA FARMER

Published
Weekly

Established
1877



Consolidated with PENNSYLVANIA STOCKMAN and FARMER

September 13, 1930



Philadelphia

Pittsburgh

Harrisburg

The Telephone helped in Rebuilding the Church

A Bell System Advertisement

NEAR Springville, Ind., there is a farmer's wife who found her telephone a great help in organizing the many affairs held to raise the money for rebuilding a church. She and the other members of the Ladies' Aid Society served dinners at public sales, sold quilts and a variety of household articles to people living about the countryside. In all of these activities the telephone proved to be an invaluable aid in making arrangements, keeping the members of the organization in touch with one another, and getting together the money to erect a modern, \$8000 church.

The telephone also proves its value in making profitable sales of livestock, grain, fruit and vegetables through co-operative associations or local markets. It is always at hand to make business and social engagements, run errands, order farm and household supplies or summon help in times of fire, accident or sickness.

The modern farm home has a telephone that serves well, rain or shine.



When writing advertisers please mention Pennsylvania Farmer

PROTECT YOUR ORCHARDS WITH CAMBRIA FENCE

When you enclose your orchards with Cambria Fence, you can rest assured that marauders will not injure or destroy your trees. Cambria Fence is strong and durable and is the logical fence for this purpose.

Cambria Fence is a Bethlehem product, manufactured at Bethlehem's Cambria Plant, Johnstown, Pa. It is a woven-wire, hinge-joint, cut-stay field fence. Full-gauge wire is

used in its manufacture. The wire has a heavy zinc coating which does not crack, flake or peel. The fence can be tightly stretched and it still retains its shape, because the Flexo Joint and the Tension Curve give it resilience, strength and flexibility.

Ask your dealer about Cambria Fence and Bethlehem Steel Fence Posts. He will be glad to give you any information you require.

USE
Bethlehem
FENCE POSTS
with CAMBRIA FENCE

BETHLEHEM

BETHLEHEM STEEL COMPANY, General Offices: Bethlehem, Pa.

Farm Facts and Fancies

By ALVA AGEE

ATTENTION has been called on this page to the choice quality of the word "homely." It means homelike, plain and worthwhile. That is why the Association of Owners of Homely Farms uses the word and would rescue it from the twisted use made of it by some ignorant people. Being in charge of publicity for this association I have called attention to the sound sense of its members, and like most farm associations it now comes forward with a sure cure for present agricultural ills. Being based on the practice of members of the association, the cure may come with more compelling force if readers are reminded of what has been said of the ways of these people.

Keeping Safe and Sane

The members regard farming as a manner of life and a means of gaining a livelihood. Lacking the cash capital to commercialize their work on an extensive basis, they choose to do as well as they can on their operating capital each year, not adding to the capital and the risk by any additional borrowing. Any undue strain would spoil for them the kind of life they have chosen, and their idea of a satisfactory livelihood is not borrowed from people who live beyond their means or those who stay in an endless struggle to appear prosperous.

They would be willing to drain some wet land if they had the cash to do it with. They might be willing to extend the acreage of a cash crop if they had plenty of money to put into a venture. They would be willing to paint buildings if they were sure about paying the cost. The primary concern is to be sure that existence is not made too strenuous to mar their idea of what their manner of life must be to pay them for living it. The risk of additional debt at the end of the year is as surely avoided as possible.

The Cure They Propose

With their background for thinking, and their leisure for thinking, they come forward with a plan based on their own experience. They hold that present ills are due to the commercializing of farming, production being increased unduly by a million farmers who borrow money to run their farms as intensively as factories are run. As I understand them, there is no criticism on this score, but only the pointing out of a fact.

They know that it is not easy to restore lost ideals, and many could not regain the appreciation of farming as a manner of living and a means of gaining a modest livelihood. Their only insistence is that if others did not push commercialized farming so hard on farms big and little, there would be no surplus production in this country, and food prices would be on the level they have in importing countries.

A Free Country

The executive committee of the association has no thought of putting on a drive for membership. That would tend to violate their conviction that every one should do as he might think best on his own farm, and do so without criticism. They have had

reason to resent some criticism what appeared as slack methods of their own when they eased along on their own farms after their own fashion. Of course they think that are right as do all groups in the country.

They simply offer their cure for consideration. As I understand it, they see the turmoil we are in, and would have each one get back to the old conception of farming, doing so for his own comfort and even regardless of the effect on any one else. They hold that agriculture is much of the mind of the harassed father of a large household who told the children that for an hour he wanted nothing from them but quiet, and very little of that.

An Endless Chain

An Associated Press dispatch from the national capital says: "The nation's investment toward reclamation of arid and semi-arid lands of the West this year reached an aggregate of \$149,200,000. Against the amount advanced by the end of the fiscal year on June 30 for the storage and diversion of water to make the desert productive, a total of \$91,930,000, or 62 per cent, had been returned to the fund from beneficiaries living on the reclamation projects. As fast as the money spent in construction of dams and irrigation works is repaid in annual installments by the beneficiaries it is used again for construction of other projects."

Not only that, but new appropriations are made. Why does the eastern farmer permit this condition of affairs to continue? We know what public sentiment is, and our farm organization leaders do go on record in protests, but government policy continues to favor the appropriation of our money to create a greater farming area.

A Successful Speculator

A neighbor came up on the porch to spend a part of the evening with me. I have known him for years as a conservative, careful fellow. Always he has seemed interested in world wheat supplies, but one must be interested in something and his interest seemed normal enough. Last evening he told me that for a year he has kept a careful record of his dealings in the Chicago wheat market, always buying or selling in single ten thousand bushel lots. When he sells short, he places a stop-loss order one cent above the market. When he buys, he places the stop-loss one cent below the market. He works at the job earnestly and told me that he now is six thousand dollars ahead.

As he came out well, the drawback is that this record was of purely imaginary purchases and sales, based on the day's quotations, and so the profit is imaginary. He would not care to risk actual money in his dealings. He says that any belief that one knows what prices will do is fatal to success. What interested me was that this cautious man was taking the trouble to keep a careful record of imaginary purchases and sales, getting a kick out of an imaginary profit and equally out of the fact that a loss he must face was imaginary.



Ayrshires on a Prince Edward Island Dairy Farm

Firestone Dealers Give You More

OF COURSE you would rather buy your tires and accessories from your local dealer, provided you get equal or better value. He is interested in you and your community.

Firestone, in cooperation with over 24,000 dealers, has taken advantage of the low prices of rubber and cotton—cut manufacturing costs, sales and distributing costs, and profits per tire, and has brought out a new line of quality tires which offer the car owner lower prices and greater values than ever before offered in the history of the rubber industry.

It has been necessary to operate the Firestone Factories twenty-four hours a day, six days a week during August to fill orders for these tires.

We want to take the mystery out of tire buying and have furnished our dealers with actual sections, not only of our tires but of others. Call on him and examine them for yourself.

Firestone Workers are Stockholders

Everyone of the 15,000 workers in the great Firestone Factories is a stockholder in the company. They back the quality of their product with their savings. The name "Firestone" is the pledge of the manufacturer and the worker that the tire you buy is the best you can obtain for the price you pay.

DOUBLE GUARANTEE

Every tire we make bears the "Firestone" name which is your protection, and carries the dealer's and our unlimited guarantee. The dealer's service helps you get all the miles out of your tires built in at the factory.

Firestone

OLDFIELD

	Our Tire (Cash Price)	Mail Order Tire
4.40-21.....	\$5.55	\$5.55
4.50-21.....	6.35	6.35
4.75-19.....	7.55	7.55
5.00-20.....	8.15	8.15
5.25-18.....	8.98	8.98
5.25-21.....	9.75	9.75
6.00-20 6-ply.....	12.55	12.90

Other Sizes Proportionately Low

H. D. TRUCK TIRES

30x5.....	19.45	19.45
32x6.....	34.10	34.10

Firestone

COURIER

	Our Tire (Cash Price)	Mail Order Tire
30x3½.....	\$4.20	\$4.20
4.40-21.....	4.79	4.79
4.50-21.....	5.35	5.35

Firestone

BATTERIES

13-Plate Sentinel.....	\$7.95
---------------------------	--------

Firestone

ANCHOR

Super Heavy Duty

	Our Tire (Cash Price)	Mail Order Super Tire
4.50-21.....	\$9.20	\$9.75
4.75-19.....	10.20	10.25
5.00-19.....	10.95	11.75
5.25-20.....	12.35	13.65
5.50-20.....	13.90	15.15
6.00-20.....	14.70	17.10
6.50-19.....	17.40	18.95
7.00-20.....	19.05	23.45

Other Sizes Proportionately Low

COMPARE CONSTRUCTION and VALUES

Firestone Tires hold all world records on road and track for Speed, Safety, and Endurance. Some people think they are high priced—but just compare quality and check these low prices. Our dealer will serve you better and save you money.

	<i>Size 4.50-21</i>	<i>Our Tire</i>	<i>Mail Order Tire</i>
More Size	4.75 in.	4.72 in.	
More Weight	16.80 lbs.	15.68 lbs.	
More Thickness . . . . .	.598 in.	.558 in.
More Plies at Tread	6 plies	5 plies	
More Rubber Volume	165 cu. in.	150 cu. in.	
Most Miles per Dollar	\$6.35	\$6.35	

A "Special Brand" tire is made by some unknown manufacturer and sold under a name that does not identify him to the public, usually because he builds his "first grade" tires under his own name.



See the FIRESTONE DEALER and Save Money

Ask Him for Copy of the FIRESTONE COOPERATIVE CATALOG



Special Offer!
Send for
FREE
SERIES OF
2
ILLUSTRATED
WORM
BULLETINS
NEW Tetrachloroethylene C. V. Treatment

Giving you practical working information that will help you remove worms from your livestock and poultry. Profit by years of study and research in the world's largest medical laboratories.

Common (large round) worms from dogs

JUST "the worms" rob the vitality and endanger the health.

No agents to annoy you—Drug Stores Sell Parke-Davis Products

NEMA
WORM CAPSULES
Kill Large Roundworms, Hookworms, Stomach Worms in Hogs, Sheep, Goats, Poultry, Dogs and Foxes.

The "no-setback" treatment
Safe, sure, easy to give—Already Nema has won high praise from thousands of Livestock Raisers. For Chickens and Turkeys, C-A Capsules remove both capeworms and large roundworms in one treatment without setback. One of the bulletins tells about C-A Capsules.

For free bulletins address:
Animal Industry Dept., Desk N-18-1
PARKE, DAVIS & CO.
Detroit, Michigan • Walkerville, Ontario

Sow
ROHRER'S
Hi-Yield
SEED WHEAT

Careful recleaning insures finer and more profitable crops from Rohrer's Hi-Yield Seed Wheat. See for yourself how superior Rohrer's Seed Wheat is by sending for FREE samples and prices of these varieties:

Long's Prolific Beardless Inward Beardless
Pennsylvania 44 Bearded
Lancaster Fulcaster Bearded

Freight prepaid on five bushels or more
P. L. ROHRER & BRO.
Box No. 4, Smoketown,
Lancaster County, Pa.

DIBBLE'S
SEED WHEAT
HONOR The best White Wheat for farms, yields 20 to 25 bushels per acre right here at Homeoye Falls.
Forward—The best Red Wheat. From 25 bushels per acre. Either variety \$1.50 per bushel. Try and improve your wheat from 10 to 20 bushels per acre at an extra cost of around a dollar per acre for the seed.
Burdett Green Eye, \$1.50 per bushel. Northern Green Eye and Common White, 10 to 15 bushels per acre. Price New crop for May. Regular shipment \$1.75 per bushel. Circular Price List and Sample Free. Address:
Edward F. Dibble Seedgrower
Box F
Homeoye Falls, N. Y.

METAL ROOFING
WE PAY THE FREIGHT
LEADCLAD KEYSTONE COPPER BEARING
WIRE FENCE AND BARB WIRE
APEX-GALVANIZED ROOFING

CONSUMERS MFG. & SUPPLY CO.
Dept. F, Moundsville, W. Va.

NESHAMINY
GARDENS
By R. P. KESTER

NO doubt the most prominent thing that will be recorded in the history of farming for the year 1930 is the extensive drouth. Never, at least not since records have been kept officially, has there been such a wide extent of territory affected by insufficient rain. Neighbors of ours who recently made an automobile journey to Wisconsin, going by a northern route and returning through Indiana, Ohio, etc., tell of distressing conditions in many places. Newspapers try to measure the effect of the drouth in dollars and cents; but that does not tell half the story.

Somebody discovered long ago that the extremes of nature strike a balance in time. If that is true this year may be considered as the compensating experience to the deluges of rain we had two and three years ago. The country has not yet solved the problems arising from the overflow of the Mississippi River and its tributaries—the land now burned and parched. This law of compensation is said to apply also to individual lives. Emerson's essay by this title is most satisfying to those who travel hard roads and meet bitter experiences in this life.

The southeastern section of Pennsylvania has not suffered greatly from lack of rain this season. The deficiency in rainfall in and around Philadelphia since the first of the year is only about three inches. July was the driest month, but up to and since July there was sufficient rain to grow good crops. Travelers say the green corn and good pasture fields are a welcome change from the parched areas they have traveled through farther west and south. A relative in my old home county has had a variety of weather experiences this year. His corn was nipped by the frost in May, nearly drowned out by rain in June, burned up by drouth in July and again hit by frost in August!

The Japanese beetles left us earlier than usual this year. I believe they applied the philosophy that some human beings live their lives by, namely, that there is more satisfaction in living fast and furious than there is in living long and slowly. The Japanese beetle simply dotes on hot weather. Heat makes him hungry and active, and he is on the job every warm, sun-shiny hour. The poet who wrote, "How doth the busy bee improve each shining hour," would have had something to write about if he had known a flock of Japanese beetles.

The beetles did not injure our peach trees to the same extent they did last year, but they did eat our apple trees more. Some of the apple trees looked as if they had been scorched by fire. But the beetles harmed the peach trees last year so much that I fear they may not get over it. This weakening of their vitality made them subject to borer attack, for did you ever notice that borers attack the weakest peach trees?

It may be of interest to report the wonderful results we have had with Chalk's Early Jewel tomatoes this year. While we have not grown them commercially, the plants we had this season have produced more tomatoes of exceptional quality than any we have ever raised. It is almost like eating an apple to bite into one, so firm are they; and there is no sign of rot or cracking about them.

Another crop that is bigger than ever before is the grape crop. Never have the vines been so laden with

fruit. However, the bunches are not so perfect as in some years. The few Sheridan vines we have have a full crop for the first time. Heretofore they have been shy bearers. We (or perhaps I should say, Wife) makes the best grape juice ever bottled. Its quality makes it a perfectly consistent product, even for an ardent W. C. T. U. worker.

Again I must refer to the subject of compensation. I used to wonder what would compensate for the loss of youth. What joy could there be in life after the strenuous days were over, not that they are over for me by a long way. But I begin to see that sources of pleasure, other than chasing elusive phantoms, will (or may) come with advancing years. One of the most satisfying is noting the well-being of your family, and the development of grandchildren. As the experiences of life soften one's nature, there is nothing that gives as great satisfaction as watching the little folks as they unfold and get ready to take their places in life. I can now understand why my grandparents were more interesting to me as a little boy than were my own parents. This joy more than repays for the busy, anxious years of middle-life.

Friendly Talks
By
Edgar L. Vincent

A MAN looks worse half shaved than he did before he touched a razor on his face.

Who was it that told the story of the folks out at sea, only one of whom had a razor? After the ship was nearing land there was a great plea for the loan of that man's razor; and the only condition he would make was that all should shave one side of their faces and pass the blade on to their neighbors. Then when all were half shaved, the owner of the razor accidentally (?) dropped the tool overboard. The shaving was over with.

Haven't you seen some men who did their farming on something like that plan? Nothing ever seemed to be finished up. Things everywhere at loose ends. The owners of such farms usually are on the keen scout from morning till night, but never catch up with their jobs, never seem to be able to keep within gunshot of them. In fact, and these men never are very prosperous. They go through life half shaved.

On the other hand there are many farmers who are worthy of the title of "neat farmers." How tidy everything looks about their homes. Buildings may not be anything wonderful, but they are always kept up well. Fences in order everywhere. Fields tidy and beautiful. Even the trees in their orchards are kept trimmed, like a well shaven face.

Why this difference in men? Is it not just this? One man holds himself steady and under good control. The other lets his work drive him. He is not master of the situation. The situation masters him. In the railway business the engineers who hold their jobs are those who "make their time" and get their trains through according to schedule. All others have been weeded out.

This is just what farming is doing. It is weeding out the men who have not the faculty of "getting there." Success holds out a beckoning hand to those who keep the faces of their farms well shaved.

HOFFMAN
seed
wheat

Don't try to save the cost of Seed Wheat by planting old wheat. Buy new, vigorous seed—Hoffman Lancaster County wheat which can produce 5 to 10 bushels more per acre with no more expense. One bushel more pays for your new seed. Hardy, sound, disease free, absolutely weed and eye clean, carefully graded, heavy yielding. Less seed required. Bags free. Freight paid. Ask for information and samples today.

A. H. HOFFMAN, Inc.
Box 428, Landisville,
Lancaster Co., Pa.

Kill Rats
Without Poison
A New Extremist that Won't Kill Livestock, Poultry, Dogs, Cats, or even Baby Chickens

K-R-O can be used about the home, barn or poultry yard with absolute safety as it contains no deadly poison. K-R-O is made of Squill, as recommended by U. S. Dept. of Agriculture, under the Connable process which insures maximum strength. Two cans killed 578 rats at Arkansas State Farm. Hundreds of other testimonials. Sold on a Money-Back Guarantee. Insist upon K-R-O, the original Squill exterminator. All druggists, 75c. Large size (four times as much) \$2.00. Direct if dealer cannot supply you. K-R-O Co., Springfield, O.

K-R-O
KILLS-RATS-ONLY

10% CUT
FROM CATALOGUE PRICES
FOR SHORT TIME ONLY
WAS \$175 NOW \$157.50
Complete for 6-Room House
INCLUDING: 6 radiators, large steam boiler, pipe fittings, valves, air valves, and asbestos cement. We Pay the Freight.
Write for FREE Catalog 90
J. M. SEIDENBERG CO., Inc.
254 West 34th Street, New York

Get Rid of
CANADA THISTLES
The Little Wonder Weed Exterminator will positively destroy them.
A spraying solution (not a chemical) costs only 6c per gallon will not ruin the soil nor kill cattle. Write for free illustrated booklet.
REBER CHEMICAL COMPANY
Reading, Pa.

FARQUHAR
SAW-MILLS
Built with Roller Bearings and Positive Geared Set Works.
Fast, Accurate Cutting
For Steam, Tractor or Gas Motor.
A. B. FARQUHAR CO., Limited, Box 646, YORK, PA.

President - - - Arthur Capper
Vice-President - - T. D. Harman
Vice-President - George M. Slocum
Editor-in-Chief - - E. S. Bayard
Manager - - - Neff Loring

PENNSYLVANIA
FARMER
Published Weekly
Established 1877

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER
Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of March 3, 1879.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., September 13, 1930

No. 11

A Few Observations in South America

By E. S. BAYARD

FROM Tocopilla, over the pampas and back to Antofagasta I had the privilege of driving with Mr. A. R. Graham, the head of the new Chilean Nitrate Company's operations in this field. He has lived and worked many years in South America and knows the country and the people. He has a rich store of experience, some of which he gave us as we went along viewing the mountains, the sunlit plain and the shimmering mirages. Some day I hope he will write about his life and work there, for it would make an interesting volume; but probably he won't because with the burden of great operations, involving thousands of men and millions of money, he will not find time to do it. Most men who could write of their experience never do it. They think they can't, but they do write splendid letters and that is all the literary talent needed to make any real experience of interest and value to the public.

Mr. Graham gave us a few glimpses of life in the high altitudes of Bolivia, where he lived for some years. In the lighter air of the high mountains his chest measurement had increased over four inches, and the chest measurements of people living there are much larger than in lower altitudes. Nature increases lung capacity as it becomes necessary to inhale a greater quantity of air to get a sufficient amount of oxygen. Back at or near the sea level, where he now lives, his greatest difficulty is to keep from putting on weight, and he finds it necessary to restrict his diet and take exercise in order to avoid this.

A Famous Collision

As we drove along we discussed various means of transportation in South America—rail, automobile, mule, horse, ox and llama, all useful under the widely varying conditions. Mr. Graham said that the United States produces the only automobiles that will stand up under the severe test of continuous use in that climate and over those roads. Several well known American cars are in service and prove satisfactory under the severest possible conditions.

The llama is not in use so much as in earlier days, it being kept only in the extreme altitudes where other animals cannot work. A race of mules from the Argentine is very useful and some of them make splendid saddle animals, going all the saddle gait and having plenty of speed and spirit. He preferred such mules to horses. Oxen are common in the interior and much of the machinery now in service there came part of the distance by ox-cart. Train service is available only to a limited extent. That famous collision between a train that runs twice a week and one that runs twice a month was described to me by Mr. Humberston.

who was on the former train. The reason for the collision was a celebration, with many bonfires and other fire-works, which prevented the engineer of one train from seeing the other. That collision is famous wherever such things are discussed, and I had heard of it under various schedules—once every two weeks for one train and once a month for the other for example. At any rate the collision has led to more care in train operation, it is said, regardless of schedules.

Depends on the Man

I asked Mr. Graham how our young American engineers and others get along in South America. He replied that it all depends on the nature and training of the individual. A young man who attends to his work and observes the customs and courtesies of the country will get along all right. One who thinks that he can disregard sound principles of living and ignore such things as courtesy and consideration for others, natives as well as associates, is booked for an early exit. So is the one who thinks he knows more about the country, its climate and its people than those who have lived there for many years. Too many young men from our country fail to remain there for some of these reasons. The people in Chile, for example, are largely a mixture of unconquered Indian and Spanish—mainly Basque—races, and to get along properly with them one must not disregard their racial, national or human feelings. My observation is that the people of our country are about the biggest hearted and the least considerate of any. I have seen groups of them in several foreign lands blocking the entrance to a hotel or a dining room, regardless of the convenience of others but innocent of any intent to be discourteous. This observation may not be worth much but it doesn't cost the reader anything and it may make somebody remember when he goes abroad.

At Antofagasta we went up to Mr. Graham's home, where we saw a glorious Bougainvillea vine on the outside and several interesting things on the inside. The Bougainvillea is a marvel among flowering vines in Peru and Chile. It blooms most of the year in that climate and under irrigation, a mass of purple which would adorn any park or private estate. Among the rare things in the house were robes made of selected portions of the skins of the vicuna and the alpaca. The vicuna is much like the llama but of finer hair and physical structure. One of the vicuna robes, used as is an eiderdown on a bed, was made up of ninety pieces, each from the neck of a vicuna. It cost over 500

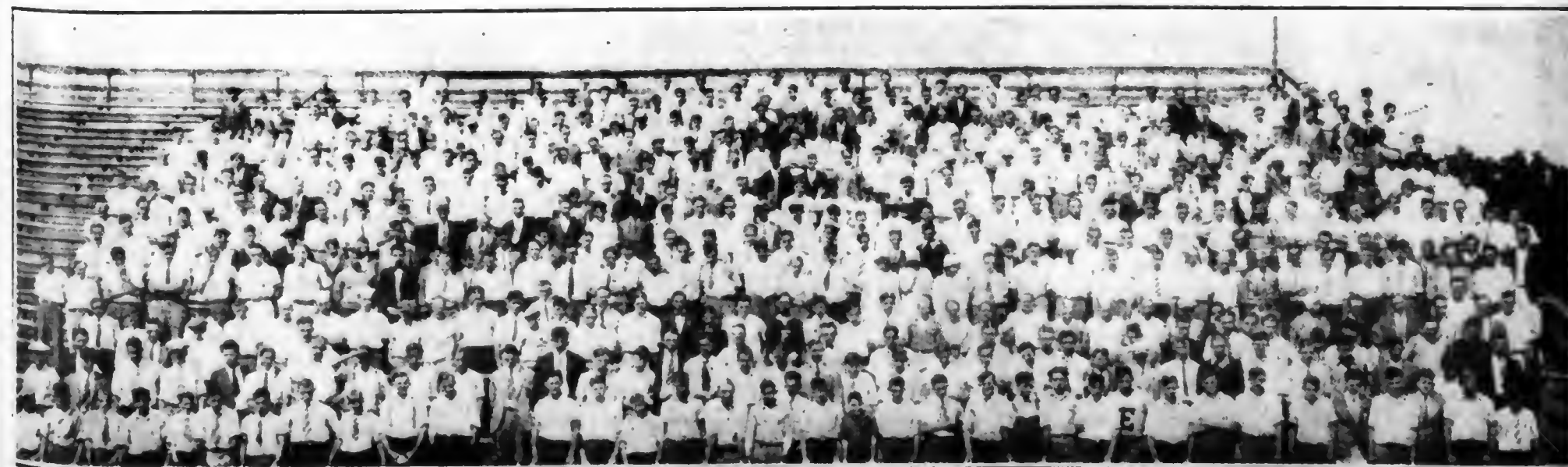
pesos or about \$65 in our money. In Chile our dollar mark is used to indicate the peso, which rates at about eight to the dollar. The visitor from our country who sees an article in the store marked \$100 or \$200 is likely to think that things are mighty dear down there—and then he remembers to divide the price by eight to get the correct value. I had a laundry bill of \$35 (Chilean) at Santiago.

When we arrived at Maria Elena, away out on the barren plain, I was told that somebody was asking for me. I went out to the patio and there was Francis Flood, with whom I had crossed the Atlantic in 1924. He was making a study of South America as a part of his regular job, which is to travel about the world and write about it for the Capper publications in the West. He was going on up to Bolivia, where a revolution was in progress, and expected to land in the United States about the middle of August. At nearly every port somebody called for some member of our party. Several college presidents and professors were in the party and former students of their institutions were ready to greet them nearly everywhere. North American colleges are making a great contribution to the development of South America, more largely in mining than in any other line perhaps but not exclusively so.

Submarine Research

Out in the harbor at Antofagasta I saw two divers at work. One of them was human and was employed to find a purse which a lady had dropped into the sea when she was paying her boatman. The diver put his armor on, and his assistants adjusted it and loaded him with lead weights, then down he went. One of the assistants attended to the line through which he got fresh air and the other turned the crank of the pump which sent the air down to him. This diver stayed under water about an hour and a half, but he came up the ladder every 20 minutes to rest and smoke a cigarette. It appeared to me that he was making a thorough search of the bottom in the vicinity of the place where the purse was lost. We could trace his course by the bubbles that came to the surface as he released the air from his diving suit. Some of these bubbles were quite large though most of them were not. It was interesting to me to watch a bubble as big as my fist wobble up from the bottom and break at the surface. Unfortunately he failed to find the purse which contained \$2,000 (Chilean) and other things of value.

The other diver was avian—a bird similar to our divers or dippers but much larger—and it started me on a new line of research. How long (Continued on page 18.)



Six hundred boys and 90 teachers of vocational agriculture who attended the recent meeting at State College, Pa.

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN AND FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
100 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President,
T. D. HARMAN, Vice-President,
GEORGE M. SLOCUM, Vice-President,
NEFF LAING, Manager

EDITORIAL STAFF
E. S. BAYARD, Editor-in-Chief
C. E. WHITE, Editor
MILES HOPKIN, Field Editor
G. W. HARRIS, Field Editor
Editorial Office: PITTSBURGH, HARRISBURG, PHILADELPHIA

Contributing Editors: R. P. Foster, Alva Agee, L. W. Lighty, W. D. Zinn,
R. C. Bloume, J. F. Shigley, F. L. Bentley, J. G. Lipman,
S. W. Fletcher, H. C. Knaud, A. A. Borland,
H. L. Scharring-Hansen, Gilbert S. Watts,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per page for line measurement, or \$14.00 per inch each insertion. Single space 5 lines. Special rates on application for livestock and feed advertising. No deceptive, immoral or swindling advertisement inserted at any price.

Domestic Agricultural Publishers' Association,
Add Bureau of Circulations

Volume 22, No. 11 Established 1877

A CHANGING INDUSTRY

ONLY 6,200 range cattle were marketed at Chicago in August, the lightest receipts on record. In August, 1895, the receipts of rangers were 105,500, the largest on record for that month. All business has changed during the past thirty-five years, and the range cattle industry is no exception.

DAIRY EXPOSITION

LAST year the National Dairy Exposition held its first show in the new buildings provided at St. Louis, Mo. It was the best dairy show on record and attracted the largest attendance. This year the show will be held at the same place as last year, October 11-19. Many eastern dairymen will take a short vacation at that time and go out to Missouri to be shown something—a real dairy show, especially.

A CORRECT ANSWER

IN an interview with representatives of the press in Washington last week Chairman Legge was asked this question: "Referring again to the reduction of acreage in the winter wheat area, do you attribute that entirely to Farm Board work?" To which he replied correctly: "Not at all. The most effective argument has been low price." Which should remind us that the most effective argument always has been and always will be the price, the open market price, which reflects the composite idea of all men about market value.

FOR BOTH AMERICAS

AN Inter-American conference on agriculture, forestry and animal industry will be held at Washington, beginning this week and extending to the 20th of this month. The leading agricultural problems of all countries will be defined and discussed. The establishment of research for the solution of some of these problems will be considered. Probably the principal immediate result will be that indefinite thing known as better understanding, which is none the less important because it cannot be expressed precisely in words and figures. The Pan-American Union has prepared a broad program for the conference, which it hopes is to be followed by others in the interest of Agricultural progress in both Americas.

A MERE GUESS

LAST week that able statistician Nat C. Mearns estimated this year's corn crop at 1,913,000,000 bushels, or 530,000,000 bush-

els below his August estimate. Official estimates are not available as this is written but they will probably reveal a substantial reduction from August figures. Evidently this corn crop is the lightest since 1901. There will be no surplus of corn and the deficiency in that grain will probably cut down the wheat surplus to a greater extent than is now expected. Hogs fed on wheat are already coming to market. All estimates as to the extent of wheat feeding are merely guesses; but it would not surprise us to find that 150,000,000 to 200,000,000 bushels had found a market by the livestock route before another crop year.

ALFALFA SHOWS UP

THE praises of alfalfa have been sung for many years. So ardent and eloquent have been its advocates that no one would suspect any unheralded fact lurking in the background. But this year has brought forth another striking illustration of the plant's value to farmers. It is seen in old fields where the green and vigorous bunches of alfalfa contrast with the dead or discouraged grasses exhausted in their struggle to draw water from a dry soil. That the deep roots of alfalfa enable this plant to withstand much dry weather is of course well known, but rarely is the fact so plainly pictured on the countryside as it is this year.

INTEREST IN HORSES

THE show of pure-bred draft horses at the Ohio State Fair this year was the largest on record with one exception—1919. Thirty new exhibitors appeared and the horses shown were nearly all home-bred. Samuel Taylor, one of the few remaining pioneers in the draft horse industry in Ohio, called attention to the fact that the great exhibits of the past were made largely by importers while those of the present are made by breeders, many of them small breeders. Most state fairs report strong shows of draft horses this year. Michigan, for instance, brought out a great parade of draft colts. That state has ten county colt clubs in their second year of operation. Pulling contests have attracted vast crowds wherever held. Evidently the draft horse still has a lot of work to do on American farms.

A LITTLE HISTORY

IT has been the rule in our country's agricultural history that a shortage of feed crops has been followed by higher prices for the products of feed. We have heard many old feeders declare that they could make more money out of dear feed than out of cheap feed. They meant that they could buy thin stock cheaper when fewer farmers were competing for it and sell fat stock higher when there was less of it on the market. This year feeder cattle, lambs and pigs are cheaper than usual in comparison with fat stock. Dairy cows are cheaper too than for some years. Feed is relatively dear as always with a short corn crop. All these things present a nice problem to every feeder, who must determine what he has to feed and what he must buy to carry on his operations. Nobody knows whether future prices for fat cattle, lambs, dairy products, etc., will pay for feed if much of it must be bought, but judging by past history they will pay for it. And, judging by the same standard, those who are in position to follow their usual course in feeding will not regret it.

BY REDUCED RATES

ROUGH relief by means of reduced freight rates on shipments of feed brings out a few points of interest. In one state a county on the list of those needing

relief of this nature asked for permits to ship in about 20 carloads. The shipment was to come from another county likewise on the list of those needing reduced freight rates. In the territory of the Allegheny Regional Advisory Board, which covers 36 counties and parts of six others in Pennsylvania, only two permits have been requested, but according to the Department of Agriculture permits have been issued in a few counties outside this freight territory. Shipments under this plan are less than expected. Pennsylvania has a surplus of hay and straw as well as local deficiencies. Those who want to know where to find some of this surplus may get the information at this office. Some abuse of the privilege of shipping feed into dry regions at reduced rates was expected by the carriers, but thus far there has been very little evidence of it. Unless it is extended later the privilege expires with this month.

NOTHING, NOTHING!

IN his address at the New York State Fair last week Alexander Legge, Chairman of the Federal Farm Board, said: "There is nothing of government in business or price-fixing in the [Farm Board's] program, but there is opportunity for farmers, if they are willing to cooperate and pull together, to get organized so that collectively they can protect themselves in a system where nearly everybody else is highly organized."

A part of the Board's program, for which the law and not the Board is responsible, is the stabilization corporation. Such corporation is financed by public funds. Its creation is with the sanction of a government or official agency—the Federal Farm Board. Its operation is under the supervision and direction of this Board. The stabilization corporation, with government funds and under official supervision, may "prepare, purchase, handle, store, process and merchandise" for members or for any one "any quantity" of the agricultural commodity with which it deals or of which it may endeavor to "control the surplus." Is all this "nothing of government in business"?

Under the law and under the Farm Board's past program one stabilization corporation has bought with government or public funds, and now holds at the expense of such funds, about 60,000,000 bushels of wheat. This wheat was bought at 35¢-40¢ per bushel above its current commercial value in a vain effort to "stabilize" the market. It now rests in storage, a constant menace because a constant uncertainty, for nobody knows the future policy of the Board in regard to it—probably not even the Board itself. Is all this "nothing of government in business"?

This year another stabilization corporation attempted to put out of business a cooperative selling organization which refused to accept the said corporation's plan and submit to its charges. The corporation put salaried agents into the field to get the cooperative organization's business. It established warehouses in competition with the cooperative organization's warehouse. It offered to lend money to producers—the money from public funds and the loans beyond the margin of safety—to lead them away from the cooperative organization. Is there "nothing of government in business" in all this work, carried on by a corporation established by a government agency and financed by government money?

In the same address Mr. Legge pleads for no amendment of the Agricultural Marketing Act. But experience thus far has proved that one vital amendment should be made. The stabilization corporation and everything that goes with it should be abolished before it creates any further business disturbance or does any more damage to producers or to others concerned in agricultural commodities.

New Jersey Farm Comment

By G. W. HARRIS

CLIMAXING the junior dairy shows in the state for this fall, the Four-H exhibits at the Trenton Inter-State Fair far surpassed any dairy club show of past years. On Labor Day 154 club animals were placed in the show ring, several of them later in the week to walk away with coveted honors in the open classes.

In the Holstein classes Carl S. Patterson of Mercer county, showing for the first time this year, took all purple ribbons in the female classes for the breed. His three-year-old heifer, Belle Echo Vale Gerben, placed first for senior and grand championships, while Nancy Mae Walker of Sun-A-Dee, his senior yearling entry, was awarded junior championship.

Robert A. Field, Monmouth county, for the third time within the past month won grand championship with his Holstein bull, King Alexian Piebe 6th. This bull was selected as grand champion at the Tri-County Junior Dairy Show at Trenton and at the Flemington Fair the week preceding the Trenton Fair.

Mercer county Four-H Club members exhibited the best county Holstein show herd. Jos. Staump, Jr., Middlesex county, was awarded a show halter for exhibiting the best fitted Holstein in the show ring.

In the special Frelinghuysen sweepstakes for the best cow with her offspring under 18 months of age, both owned by the exhibitor, George Allen of Middlesex county placed first with his cow, Lady Piebe Echo. This class is the result of a revolving loan fund established in 1921 by the Hon. Joseph S. Frelinghuysen, former president of the State Board of Agriculture, and Julius Forstman of Passaic. This fund of \$30,000 was placed by them under the management of the Department of Agriculture to loan to boys and girls for securing pure-bred livestock. Since 1921 nearly \$78,000 has been borrowed by these young farmers for about 1,000 individual purchases of stock. Only animals purchased through the Frelinghuysen fund were eligible to compete in this sweepstakes class.

Blue ribbons were not easily won in the show ring at Trenton. As most of the classes were large, all animals well grown and fitted, competition for first place was very keen. Lillian Tindall, a Mercer county club girl, showed the first prize junior female calf, Sadie Vale Ormsby Segis. Besides his two championship animals Carl Patterson exhibited three other blue ribbon winners, Sun-A-Dee May Dekol, senior calf; Sun-A-Dee Korndyke Inkay, bull calf; and the blue ribbon offspring of one of his club cows.

Chester Tindall placed first in the class of aged cows with his animal, Gertrude Valdessa Korndyke, and also took first in a class of offspring of club sires. The best two-year-old heifer, Shady Dell Jewell Beets, was shown by Joseph Hoser of Warren county. King Alexina Piebe 9th, owned by Carlton Lawrence of Monmouth county, was judged the best yearling bull.

A Repeater

Marjorie Farry, a Monmouth county club member who showed the senior and grand champion Guernsey female at the Tri-County Junior Dairy Show several weeks ago, again took those purple ribbons at the Trenton Fair against greater competition. This cow not only won the championships and placed first in her class, but also placed first in a large class of offspring of club cows and first in the Frelinghuysen sweepstakes.

The junior Guernsey female was a junior yearling, Abeline Myrtilla, owned by McMaster Tweed of Salem county. Three other blue ribbons in this breed went to Salem county club members: senior calf, William H. Beal, Jr.; senior yearling, Samuel J. M. Beal; two-year-old heifer, Edna Mae Beal. Dorothy Garner, Mercer county, not only won first place with her three-year-old heifer, Rebecca of Edgebrook Farm, but this animal also was judged the best fitted Guernsey in the show. Another club girl, Tesse Scott of Warren county, placed a blue ribbon animal in the class of junior calves.

The grand champion bull, Coast Guard, was shown by a Monmouth county club boy, Clifton J. Wardell. Dorothy Gardner again took two firsts with her bull calf, Edgebrook Paymaster, in its class and in the offspring class. The prize winning yearling bull Midget's Brooklawn Boy, was owned and exhibited by Ernest Pickle of Morris county. Roger L. Merrick, a junior Guernsey breeder in Monmouth county, was for the third time awarded the prize as the best showman of all breeds. He placed first in showmanship at the Tri-County

show and at Flemington when he led his bull, Blossoms Farms, Noble Buddy, around the show ring.

Monmouth county, exhibiting against Morris and Mercer counties, was awarded the best Guernsey county show herd.

George Savidge repeated his former winnings in the Jersey classes by carrying off all championships in the female classes. This Mercer county club boy showed the Junior champion Jersey calf at the Tri-County show at Flemington and at the Trenton Fair as well as the senior and grand champion cow, Sweeps Princess. He also won two blue ribbons with Sweeps Princess Dairy Maid, one against a class of two-year-old heifers and one in the offspring class.

Maxwell Busby, Jr., Salem county, took first with his senior calf; Charles Davison, Middlesex, showed the best junior yearling female, and William Kendall, Middlesex county, the blue ribbon bull calf.



Threshing sweet clover seed with a combine on the farm of Hiram Dobbin.

Margaret Kendall of Middlesex county won the Frelinghuysen sweepstakes with Bowline's Noble Blossom and her offspring. Mercer county took another herd blue ribbon by winning the Jersey herd first over Middlesex county.

Wayne Savidge, the best Jersey showman in the ring, took grand championship with his yearling bull, Rutgers Brightness Forward.

Only one Ayrshire was entered in the Four-H show this year. That was the junior and grand champion calf shown by Foster Watters of Morris county.

Combine Harvests Sweet Clover

WE did not expect to harvest our sweet clover, but let it fall to the ground to plow under for corn. The seed had already begun to fall when a neighbor who has a combine proposed to thresh it right on the ground on shares. The stems proved much greener than they appeared to be and soon clogged up the worm conveyors and elevators.

By changing the chaffing riddle for a much smaller perforation and extending it by tacking on a strip of tin this green stuff was discharged from the machine promptly instead of going into the conveyors. At best sweet clover ripens very unevenly and quite a sprinkle of blossoms remained all over the field.

In practical operation the green seed and some refuse drops into the tank used for wheat. This was opened to permit the unhusked seed to drop to the ground, while the mature seed was recovered in the bag used for weed seed in ordinary grain combining.

The machine left a stubble around twenty-five inches high which we clipped with the mower. This double operation leaves the straw in much better mechanical condition than if the clover had merely been clipped at first.

Hiram Dobbin.

ROBERT EARD, a Hunterdon county club boy, won the silver cup in the boys' and girls' dairy judging contest at the Flemington Fair. This cup was donated by D. H. Agans, master of the New Jersey State Grange.

NEW JERSEY dairymen under the direction of E. J. Perry, dairy specialist, will conduct a tour to Beltsville, Maryland, to visit the United States Government Dairy Farm on October 1, 2 and 3. This is a repetition of a similar tour held

three years ago, and many who visited Beltsville at that time are planning to take this trip again.

MARTIN J. SHERIDAN, Jr., owner of Blossom Hill Farms in Hunterdon county, is one of the leading advanced registry breeders in the United States. Seven cows in his herd this year averaged over 15,000 pounds of milk.

W. R. Robbers, who is superintendent of advanced registry work in New Jersey, gives the records made by these animals in Mr. Sheridan's Holstein herd.

A ten-year-old cow, Howtje Maid Korndyke, produced 19,332 pounds of milk and 530 pounds of fat in a year. A nine-year-old, Miss Pieterje Colantha, produced 16,636 pounds of milk and 468.8 pounds of fat in 335 days. Blossom Hill Lucella, a four-year-old cow, produced 15,157 pounds of milk and 466 pounds of fat, while Blossom Hill Lady Nell, an animal of the same age, made 15,132 pounds of milk and 476 pounds of fat in 348 days. Blossom Hill Echo Violet produced 15,964 pounds of milk and 514.9 pounds of fat; Blossom Hill Yvonne made 14,364 pounds of milk and 505.8 pounds of fat; and Blossom Hill Echo Mate made 13,828 pounds of milk and 415.2 pounds of fat. These last three animals were all three-year-olds.

AGRICULTURAL leaders, scientists, educators and government officials will take part in the exercises commemorating the fiftieth anniversary of the New Jersey Agricultural Experiment Station to be held at New Brunswick October 8 and 9. The New Jersey Agricultural Experiment Station was established at New Brunswick in March, 1880, by an act of the legislature which provided state funds for its support. The work of the institution received an additional impetus eight years later when an act of Congress made available federal funds also for the support of agricultural research. This state and federal support has been continued to the present.

Dr. Cook, the first director, was a leader among the small group of men who early saw the need for an agricultural research institution in New Jersey and who worked tirelessly for its establishment. He served as director until his death in 1889. He was succeeded by Dr. Voorhees, who continued and enlarged the program of the institution.

Memorial tablets to Dr. George H. Cook and Dr. E. B. Voorhees, first and second directors, respectively, of the Experiment Station, will be unveiled by Dr. Demarest.

These tablets will be set up on the site of the first house in what later became the campus of the Experiment Station. This house was built in 1750 by Johannes Voorhees.

Speakers the first day of the anniversary will include Governor Morgan F. Larson; James Neilson of New Brunswick, president of the board of managers of the Experiment Station; Dr. W. H. S. Demarest, president of Rutgers Theological Seminary, and former president of Rutgers University; Dr. A. F. Woods, director of research, U. S. Department of Agriculture; and Dr. J. G. Lipman, director of the New Jersey Agricultural Experiment Station and dean of the College of Agriculture, Rutgers University.

The exercises on the second day will take the form of a special convocation that has been authorized by the trustees of Rutgers University. At that time honorary doctor of science degrees will be conferred on a number of American and European scientists who have made outstanding contributions to agricultural progress. The convocation will be held in Voorhees Chapel, New Jersey College for Women.

An address by Sir John Russell, director of the Rothamsted Agricultural Experiment Station, Harpenden, England, will give the exercises an international aspect. Present at the convocation will be trustees and faculty members of Rutgers University, representatives of agriculture from foreign countries state and national departments of agriculture, American and European universities.

FARM products are coming to market in such fancy packages and all dressed up in a manner which would make it difficult for our grandfathers to recognize them. One of the latest marketing packages is egg cartons wrapped in cellophane. Cellophane is a tough transparent material which does not readily admit moisture or air. Pacific Coast egg producers who are using this type of egg carton say that it has the property of conserving carbon dioxide gas, thus retarding deterioration of the eggs.

"V"AR well, I tell heem w'at yo' say," replied Ubal, calmly.

Back he came promptly. "M'sieu' John Flanders geeve hees complimenting to M'sieu' Lud Doody, and he say he have some-thing dat he mus' talk with you', and so he say yo' batter come 'long onto his room.' The French-Canadian's voice was low and even, but it had a ring of insistence that was almost menace.

"That to your M'sieu' John Flanders!" cried Doody, snapping his fingers loudly.

"When M'sieu' John Flanders he say he lak to talk som' business with mans in this house, and when M'sieu' John Flanders he can't com' off hees bed, dat odder mans com' to dat bed. Yassir! Jasso!"

Without another word the sturdy host made at Doody, who was unprepared for the sudden onslaught.

Before Doody could defend himself, the French-Canadian had thrown his arms about his captive, pinning him at the elbows.

Doody was wily, toughened by years at the paddle, hardened by many miles of woods trails and duftel-toting.

He flung himself to and fro, and writhed in the Canadian's grasp like an eel. But his fists were useless, and the stocky man who clutched him had arms like the jaws of a vise. His sturdy, short legs were set under him like a stone foundation. He heaved Doody off the floor and staggered away with him. They banged against the door leading into the inner room, and as the host threw his captive roughly into a chair beside the customs inspectors' bed he cried:

"M'sieu' John Flanders, here com' M'sieu' Lud Doody to mak' yo' a leetle evenin' call, and he hope yo' feelin' better of yo' sickness, and ban much oblige' for de invite."

Doody growled and wriggled in his chair, but did not get up.

"Wasn't there another man that came down the river in the canoe with Mr. Doody?" inquired the inspector. "Well, send him in, too."

Shain, who had gaped open-mouthed at Ubal's methods of playing master of social functions in his tavern, came at the host's first intimation that he was wanted in the inspector's room. Then Ubal, with a most polite bow, retired and shut the door behind him.

Inspector Flanders was really in the bed, and not simply on it. Mrs. Cyr's best goose-feather tick had opened and gulped him down. Two or three fat pillows propped his back, for that indefatigable servant of the people was determined that he would not lie down. There were those in the Madavaska country who averred that Flanders, in health, did not lie down even to sleep, but stood up like a horse, posting himself beside some of the thoroughfares near the line.

HE was a man of fifty, with close-cropped, iron-gray hair and aggressive chin-whiskers. In-corrutable, zealous, dauntless, and possessed of the idea that the United States government was to be spoken of with awe, and that he, one of its humblest servants, occupied a position prouder than that of foreign potentates, he was an officer whom all the smugglers on the border feared and hated, and threatened beneath their breath. Reports of this hatred and of these threats Flanders welcomed as the highest compliments a government employe could receive.

"Well, Doody," he demanded, scowling at his involuntary caller, "you haven't got a hand-sewed leg on you, so that you have to be toted round like an infant, have you?"

"P'raps you think you're the autocrat of the Rooshies to give off your orders, and have men lugged round for your convenience like they was pounds of sassafras?" snarled Doody, settling his coat round him. "And then again p'raps you ain't, and you'll see you ain't!"

"Why didn't you come in here when I asked you, pleasant and agreeable?" inquired the officer, sternly.

"Why I'm feelin' conversational, I'm plenty able to pick my own company," returned Doody, sullenly. "And I've got to feel pretty mighty conversational to talk with a man in your business." There was rancor in his voice. "I don't like your style, John Flanders, and I never liked you, and I ain't the kind to toady round and tell you so."

"Whom did you meet when you were coming down the Allegash?" asked Flanders.

"Hen-hawks, mostly."

"Hen-hawks with United States badges on, I suppose?"

"I didn't get near enough to see, I don't like hen-hawks for my company or to pass the time of day with." He got up and made a move toward the door.

"Hold on, Lud Doody!" shouted the inspector. "If I vote on two legs I'd throw you back into your chair and sit on you till I had finished our talk. As it is well, you sit down, that's all!"

He jerked a revolver from under the bedclothes and held it with muzzle pointed downward. "My own two hands have always been good enough for me, and will be after I get that leg under me once

The Skokums of the Allegash

By Holman F. Day

Copyright, 1907, by Perry Mason Company, Boston, Mass.

SYNOPSIS

The Mayor of Toban Jawa is the title, given in fun by the rough drivers who direct the stream of logs down the river, to the "runt" of the gang who is left alone all season to watch a ledge and prevent logs piling up there and causing a jam. This job falls to young Shain Seaway on his first trip with the river men. At first very lonesome he learns to like the river and enjoys occasional visitors who use it as a thoroughfare. One of these is Lud Doody, a man who shows a rod to find treasure with and induces Shain to accompany him in search of a fortune. Leaving Doody's former partner, much against his will, to guard the jaws and prevent a log jam young Seaway prepares for his great adventure. After some traveling by canoe they stop at a settlement where they are met by several suspicious-looking characters who seem to know Doody. A man, apparently one of their gang, rushes into camp crying that he has shot some one. Doody hurries Shain away, and as they paddle down the river they hide from other canoes, which Shain learns carry customs officers on the trail of the man who did the shooting. On arriving at Ubal Cyr's hotel they learn that John Flanders, the wounded man, is in the hotel.

more. But you've got to stay here, and this is going to make you stay."

"I'm a free citizen, and you've got no right to keep me here!" shouted Doody.

"Your friend that put a bullet into my leg had no right to do that, either. But you and I have known for a long time that might often makes right along the border. Where did you meet Clair Salter?"

The Cheerful Plowman



SUE HIM? NO, SIR!

Sue him? Not while I have mind. I am neither dense nor blind. Sue a man as rich as he? Not while I can walk and see. Listen, Lawyer Link McLoud: thirty years I've hoed and plowed and I find I've salted down in the little bank in town just enough to lay me by should I wait some day and die, just enough to keep the folks free from charities and yokes, while the man you'd have me sue just to get my honest due has a million dollars flat. Catch me suing such as that?

What would happen? Listen here: He'd stave action off, I fear, till my great-grandchild was old, till the moon was bought and sold. The case would be continued, friend, time again, and time on end. It would almost come to trial when a paper he would file that would set it back six years while I shed big salted tears.

There would be a witness due from the Straits of Marlevue, but the guy would miss his boat, then again I'd be the goat. Or, suppose (in mere report) that case did get into court, and suppose (I have to grin) the jury brought a verdict in the verdict declared that I was right, entitled to a tiny bite of that fellow's great estate what would happen, please relate? Well, at once that gent would file for a new and better trial; evidence, new stuff, he'd say, showed up on the very day that the verdict came across. So far all would be a loss.

Then that second trial would pend year on year without an end, and the day would come I fear when the witnesses now here all would slumber in the grave with the patient and the brave. Sue that man to get my rights? Start a train of legal fights? Not while I can see and talk, not while I can limp or walk, not while I can think a bit. Sue him? Not a bit of it!

J. E. T.

Doody stood straight, clenched his fists at his side, and said:

"I'm not in the pay of the United States government as a spy, and I'm not on the witness-stand in the circuit court. I ain't even goin' to humiliate you to the extent of sayin' that I didn't see him. I'm just goin' to jam that between my lips—he set a strand of his gray beard between his teeth—and hold it there, and I'd like to see you make me drop it." He mumbled the last words between closed teeth.

The officer scowled blackly at his stubborn prisoner.

"You've been pretty lucky up to now, Doody," said the inspector, at last. "But I'm going to say something to you that I never before said to a man I was after. You have refused to help me catch a man who put a bullet into me when I was doing my sworn duty. And I want to say to you that a man is a cheap wretch who will let a smuggling friendship protect a man who has tried to kill an officer of his own government, when that officer is trying to perform his work that he has sworn to do. As man to man I might ask and expect you to help me catch a rascal who shot me. As a citizen of the United States you ought to feel bound to help me. But if this is your stamp, Doody, you go! And when I put you in the dock, as I swear to do some day, don't you expect to get one word of anything except the black truth from the chief witness, and that will be John Flanders. Get out! If this thing here can't make you speak, it can drive you."

He raised the weapon.

"Come along, son," said Doody, motioning to the door. His face was white with anger.

"You can't be very proud of the man you're with," said the officer, scornfully. "I don't know where you are from or who you are, but you don't belong with him, and I'm going to tell you why. Move along, Doody. Your young friend is going to have a talk with me." And he added in a taunting way, "Seeing that he has no whiskers that he can bite on, he may be in a more conversational mood about what you met on the Allegash."

"We'll call his bluff, son!" shouted Doody. "He don't dare to shoot. Come along!"

But Shain stood there, respect for authority that he had never gained uniting with healthy fear of Flanders' revolver.

Doody's face grew more white as he realized the danger in which he was placed. He knew that with himself out of the room, Flanders would argue or browbeat Shain into revelations.

The next instant he ducked down behind the foot-board of the old-fashioned bed, and came up with a huge braided rag rug, jerking himself with the speed of a jack-in-a-box. Before Flanders realized his purpose, he flung the heavy rug into the officer's face, and its folds enveloped his head. One swift "puff," and Doody had blown out the light, and before the officer got his head out of the rug to call for help, Doody had shoved the bewildered youth out of the window and was racing him to the shore. When they reached the canoe, Shain was in a panic, and every whit as eager a fugitive as the other.

In a moment they had dropped the canoe upon the water and were paddling furiously away downstream, for winking lights on the shore hinted that pursuit was intended.

AT the first turn of the river the canoe was driving rapidly and hugging the dark shadows of the shore.

"Easy, so!" whispered Doody, and Shain stopped paddling. They looked behind. The lanterns were moving back toward the tavern, winking between the striding legs of the men. There was no sound on the waters behind them.

"There's no one coming!" growled Doody. "And they've got no reason to be chasing us, anyway." They paddled along after that with a steady, easy swing.

"We were fools to run away like that and leave our dunnage," said the old man. "But I got a little rattled when he tried to corner you away from me. I was afraid you didn't have an old enough head for him. Would you have told him well, say, about that fellow cryin' out there in the canoe at Dirty Donald's, and the crowd there talkin' things over by the bateau, and and of the little nonsense that I've let drop?" Doody's tone was solicitous and almost appealing.

"I don't know," said Shain.

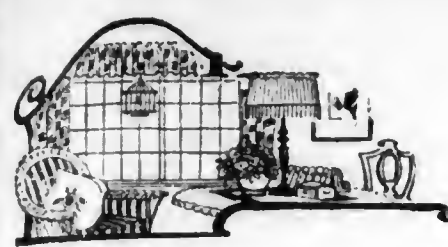
"Don't know!" exclaimed Doody. "Why, you don't mean to hint that you would have opened your mouth to that inspector, do you?"

The young man paddled on for some time without replying.

"You don't mean to tell me that you'd have let out one word?" persisted Doody. "You saw me, didn't you? Well, if you can't back 'em down you can lie, can't you?"

Shain stopped paddling and looked straight ahead into the soft dusk. Doody stopped also, and the canoe slid noiselessly through the shadows.

(To be continued.)



The Nervous Child

By EDITH D. DIXON

MORRIS was nervous and flighty. He was unable to get on with other children in school. Yet the teacher liked him and believed he was bright enough to do the work if only he could be induced to make the effort. However, she was never able to get his attention for more than a moment. The end of the term was approaching and Morris had learned nothing.

The story had been much the same when Morris was in kindergarten. The teacher had said, "He does nothing but run around kicking down the houses that the other children build and striking any one who gets in his way. I don't think it is meanness; he is nervous and excited and acts as if he didn't quite know what to do with himself. When I give him my undivided attention he will settle down and do something, but as soon as I leave him alone he interferes with some other child."

A Case of Jealousy

An examination showed Morris to be below normal weight for his height and age. This resulted in fatigue which was causing the excessive restlessness. Excitability, too, was due to tenseness in the home atmosphere, for the father and mother were unhappy and disagreed on most matters. Marked favoritism was being shown the baby sister and this had brought about a well-developed case of jealousy in Morris. His peculiar behavior was no doubt an effort to center the attention of the teacher and children on himself in order to satisfy a desire which was not being recognized at home.

It was recommended that Morris be put on a well-regulated program of diet, rest and exercise. That the parents find equal though not necessarily similar ways of conferring attention and of expressing interest and affection for both children. And, in order to improve the home atmosphere, that they attempt to get each other's viewpoint and cease wrangling before the children. Morris was given some attractive primers and the mother was asked to have him read a little each day through the summer.

In the fall the school reported that Morris was doing well. He had been promoted to the upper half of the first grade. He was less tense and showed no evidence of being over-active, though he still talked a great deal. The mother stated that Morris was now one of the good readers in the class. She seemed much less tense, was more contented and remarked that she had never realized before that her disagreements with her husband had any effect on the children.

Probably Adenoids

IF your child's nose runs, if he snuffles, seems dull and stands around with lips apart, if he sleeps with his mouth open and snores and is susceptible to colds, diseased tonsils and adenoids may be suspected.

The advice of a specialist in ear, eye, nose and throat diseases should then be sought. Adenoids often show themselves through the child's complaint of earache. Ear trouble is dangerous and should be attended to immediately. Deafness may be the result of neglect, for the ear is a most delicate organ. Do not trust home treatment in case of earache. The hotpack your own mother used is now taboo. Consult your physician.

The child with diseased tonsils and adenoids has a serious fight ahead should he have the misfortune to fall victim to measles, diphtheria, scarlet fever or whooping-cough. Rheumatism, heart disease, stomach, bowel and lung trouble may come as a result of harboring tonsils and adenoids which should be removed.

A layman can enter a schoolroom and pick out the children suffering from the handicap of badly infected tonsils and adenoids. Among the bright alert faces of the healthy pupils there are those who sit with

dull eyes, a drawn expression about the nose and mouth, mouth breathing and a general attitude of listlessness. Such children are not having a fair chance.

One rural community outfitted four rooms as a hospital for the removal of tonsils and adenoids. Being thirty-five miles away from the nearest hospital only eight children in the county, in the year previous to the establishment of the hospital, had the operation performed although school records showed a large number in dire need of such relief.

With the equipment of the miniature hospital to which a city surgeon came each week, over two hundred children had the correction made in a period of not quite two years. A nominal charge was made for those who could pay and charity cases were cared for. The nearness made it possible for the busy farm families to take their children for relief with the least cost and loss of time.

The small hospital has paved the way for a large one which is now under construction.

Do not subject a child to the operation if his tonsils are in healthy condition. "Out with them" if diseased. R. G. Beachley, M.D., Dr.P.H. and Nell C. Westcott.

Cheap Patty Shells

FOR a community gathering, home party, reunion or any other large gathering it is easy and convenient to serve the creamed chicken, the creamed oysters or other dish that calls for patty shells in cases or cups that cost less than the breakable, tender patty shells used at parties. If the very thin, tender shells are purchased at the bakery they cost twice as much as plain rolls, and if made at home they are a great deal of trouble.

Ask your town baker to give the rolls for your gathering an extra coat of brown so that they may be firm and substantial. Cut a round hole in the top and lift out the crumbs which can be saved for various dishes or bread dressings. Often they are used for dressing for the gathering and form an acceptable dish. Now place the rolls in the oven which should be rather hot, and crisp them for ten minutes before you want to serve the meal. Fill with the creamed mixture, add a little of the sauce or gravy around the roll and the thing is done. They are delicious.

Hilda Richmond.

Cricket on the Hearth

IN spite of a certain amount of sentiment attached to the merry chirp of a cricket that has found its way inside a house, these insects do some damage to furnishings, and if very prevalent are really destructive. They eat curtains, garments, book bindings and rugs, especially if these are wet or moist. Their continuous and noisy chirpings are a great annoyance. Crickets often breed in great numbers in garbage dumps near residences.

The most effective way to get rid of them permanently is to have such spots cleaned up entirely or treated with waste oil. Infested rooms may be relieved of the presence of some of these noisy visitors by the use of poisoned baits.

What has been facetiously referred to as "a banana split for crickets" is the formula for poisoned bait recommended by the Bureau of Entomology of the U. S. Department of Agriculture. Dissolve one tablet of bichloride of mercury in one-half cup of water and then add one-half cup of flour and stir well into a paste. Cut into small pieces the skin of a banana and mix into the paste and then spread small quantities on cardboard and place about the infested room. Care should be taken to keep the bait out of reach of children and pets.



CRICKETS

Tomato Preserves

HAVEN'T you often wondered just how the delicious preserves of little yellow, pear-shaped tomatoes were made? Here's a recipe from the Bureau of Home Economics of the U. S. Department of Agriculture:

Eight pounds yellow, pear-shaped tomatoes, six pounds sugar, two lemons, sliced thin, with seeds removed, one and one-half quarts water, four to six pieces ginger root.

Cook the lemons until the skin is tender in one pint of water. Boil together the remaining water and sugar to make a syrup, and drop in the tomatoes, ginger root, and the cooked lemon rind and liquid. Boil until the tomatoes are somewhat clear, and the syrup thick. Remove the scum, and pour the preserves into hot sterilized glass jars. Seal and store in a cool dry place.

When Cupboard Space Is Needed

DID you ever hear of taking your closet and corner cupboard right along with you when you move? It may be handy in the next house where you live. That is the advantage of buying the cupboard separate, instead of calling in a carpenter to build one.

Utility closets can be purchased separately, to match the kitchen cabinet, placing one on each side of it. Or you can get one to put in the back entry way or in the children's playroom, or in the sewing room. Any place that brooms, dusters and various tools need a safe, clean, neat house, the broom closet comes in handy. The cupboard with shelves is useful for dishes, cooking utensils, toys, sewing materials, or books and magazines.

These cupboards may be bought in oak, gray, white or other colors. They are sold where kitchen cabinets are handled. They are easily cleaned under with the dustmop, and very attractive. Therefore, I thought I might pass the good news along to you, if you had been dreading the job of having sawdust and wood strewn about in the making of a cupboard.

Doris McCray.



If your house lacks cupboards, here are two suggestions.

TWO HELPERS INSTEAD OF ONE IN EVERY BAR
That's why

FELS-NAPTHA SAVES YOUR CLOTHES— YOUR HANDS—AND YOU

FELS-NAPTHA brings you good golden soap and plenty of naphtha, working together to loosen stubborn dirt—quicker, easier. It gets things clean—without hard rubbing. It saves your clothes. It saves your hands. It saves YOU!

And that's why millions say Fels-Naptha is the real washday bargain. It brings you not more bars but more help—extra help!

Do your next washing with Fels-Naptha and discover this extra help for yourself. Take the wrapper from a golden bar and you'll smell the dirt-loosening naphtha—plenty there! Feel the velvety smooth bar—and you'll know the soap is unusually good.

With these two fine active cleaners, working hand-in-hand, you're bound to get extra help. Extra help that gets your clothes delightfully sweet and

clean with less effort on your part. Try Fels-Naptha in tub or machine; in hot, lukewarm or even cool water; and whether you soak or boil your clothes. Try it for easier household cleaning. Get a few bars—or the handy ten-bar carton—at your grocer's today.

SPECIAL OFFER—We'll be glad to send every user of laundry soap a Fels-Naptha Chipper. Many women who chip Fels-Naptha into their washing machines, tubs or basins find this chipper handier than a knife. Use it and Fels-Naptha to make fresh, golden soap chips (that contain plenty of naphtha!) just as you need them. Send only a two-cent stamp to help cover postage, and we'll mail you this chipper without further cost. Write today. Dept. 7-9-12. Fels & Company, Philadelphia, Pa.

THE GOLDEN BAR WITH THE CLEAN NAPHTHA ODOR

FELS-NAPHTHA

MAN WANTED! WITH CAR

My Money Starts You In Business... A New Easy Way
I CAN use a few more married men of good appearance, fair education, who will work, I will finance you and ship entire stock to you on credit. You must be able to furnish good references and have car for delivery. This is not a high-pressure selling proposition but a permanent business of your own. Profits not large to start but will increase as you learn the business. Some are making \$1,000 and \$1,500 a year. Write to me and I will send you details of my "New Investment" offer at once. Address: G. A. Ottom, McCann & Company, "The House of Friendly Service," Dept. 2-5305, Winona, Minn.

Complete Your Toilet with Cuticura Talcum Fragrant and Refreshing

Price 25c. Sample free.
Address: "Cuticura," Dept. 59, Malden, Mass.

USE VANILLA? When you use double-strength Brand, Vanilla and Cumin. To induce you to try it, we will send 2 pint 12-ounce bottles, powdered for only \$1.00. A high-grade quality product absolutely guaranteed not to bake or boil out. If not entirely satisfactory we refund money. Compare the price with what you are paying and save money. Buy direct from the manufacturer. **HESLER & BEDFORD**, 143 West Main Street, New London, Ohio.

GIVEN! FOR SELLING GUM
Use either salt, drops, sticks, dippers, bars "Mama," "Candy," "Lollipop," "Drops," and "Gum." Give away 100 pieces of gum for every 100 pieces of gum sold. **Charles Davis, Inc., V. Cincinnati, O., Dept. 1055**

A Scuttle of Coal Goes Further with a WINOLA

It's a revelation how long a scuttle of coal lasts in the beautiful and modern Winola Parlor Heater. Improved draft control and scientific arrangement of grates and heat radiation have made it the choice of folks who want the best.

The distinctive finish in full porcelain enamel mahogany will add beauty and dignity to any room—at a very reasonable price.

So great is our faith in the Winola that we offer it with the liberal Wincroft Five-Year Guarantee Bond. Ask about it at your regular stove dealer.

**Wincroft Stove Works
Middletown, Pennsylvania**

In the Pennsylvania Farmer are Names—names of advertised products. Time and again you see them. They are like old friends—to be trusted. Their names mean economy, full value and integrity.

Tell the manufacturer you saw their ad in Pennsylvania Farmer.



For Autumn's Cool Days

No. 6911.—Misses' coat. Cut in three sizes: 16, 18 and 20 years. An 18-year size with the capes requires 3½ yards of 54-inch material. Without the capes 2½ yards will be required. To line coat and sleeves requires 3¼ yards 39 inches wide. To line the capes requires 1½ yards. Price 15c or two for 25c.

No. 6912.—Ladies' dress. Cut in nine sizes: 38, 40, 42, 44, 46, 48, 50, 52 and 54 inches bust measure. A 48-inch size requires 5½ yards of material 39 inches wide. The width of the dress at the lower edge with fullness extended is 2½ yards. Price 15c or two for 25c.

No. 6945.—Ladies' dress. Cut in five sizes: 34, 36, 38, 40 and 42 inches bust measure. To make the dress with the cape, in a 38-inch size requires 5½ yards of 39-inch material. Without the cape 4½ yards. The cape alone requires 1 yard. To make cape, collar, tie and belt of contrasting material requires 1¼ yard 39 inches wide, cut lengthwise. Price 15c or two for 25c.

No. 6938.—Misses' and ladies' dress. Cut in three sizes for misses: 16, 18 and 20 years, and in five sizes for ladies: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 4½ yards of 39-inch material. Price 15c or two for 25c.

No. 6951.—Ladies' dance set. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. Price 15c or two for 25c.

No. 6961.—Girls' dress. Cut in five sizes: 1, 2, 3, 4 and 5 years. A 2-year size requires 1½ yards of 32-inch material. To finish with bias binding or piping requires 3¼ yards 1½ inches wide. Price 15c or two for 25c.

No. 6908.—Ladies' undergarment. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2½ yards of 39-inch material. The shoulder straps of ribbon require 1 yard. Price 15c or two for 25c.

No. 6778.—Ladies' dress with slender hips. Cut in eight sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 44-inch size requires 5½ yards of 39-inch material. The vestee of lace requires ¼ yard 12 inches wide. Price 15c or two for 25c.

No. 6961.—Ladies' blouse. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires 2½ yards of material 39 inches wide. Price 15c or two for 25c.

No. 6919.—Ladies' morning frock. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 5½ yards of 35-inch material. Price 15c or two for 25c.

No. 6755.—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. A 12-year size requires 2½ yards of 35-inch material. To make dress with contrasting material, tie and band cuffs of contrasting material requires ¾ yard 35 inches wide, cut crosswise. Price 15c or two for 25c.

No. 6772.—Ladies' dress. Cut in eight sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 48-inch size requires 5½ yards of 39-inch material. Price 15c or two for 25c.

HOW TO ORDER
Write plainly, giving pattern number and size. Address: Pattern Department, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.

Prove it! Prove it! ..it does act twice



1ST ACTION



2ND ACTION

TEST CALUMET'S DOUBLE-ACTION THIS WAY

When baking, you can't see how Double-Action works inside the batter to make it rise. But, by this simple demonstration with Baking Powder and water in a glass, you can see clearly how Calumet acts to make your baking better. Put two level teaspoons of Calumet into a glass, add two level teaspoons of water, stir rapidly with a spoon, and remove the spoon. The mixture will rise slowly, half an inch or so. This is Calumet's first action—the action that Calumet specially

provides to take place in the mixing bowl when you add liquid to your dry ingredients.

After the mixture has entirely stopped rising, stand the glass in a pan of hot water on the stove. In a moment a second rising will start and continue until the mixture reaches the top of the glass. This is Calumet's second action—the action that Calumet holds in reserve to take place in the heat of your oven. Make this test to-day. See Calumet's Double-Action which protects your baking from failure.

Millions of women know Calumet's DOUBLE-ACTION makes better baking

They know—the millions of women who praise Calumet, The Double-Acting Baking Powder. They have seen for themselves that Calumet's marvelous double-action brings new perfection to baking! New confidence of success! New pride in everything they bake.

Enjoy this great satisfaction of turning out one baking triumph after another. Let Calumet's Double-Action make your biscuits lighter, fluffier than ever before—your cakes more delicate, more delicious.

Calumet's first action begins in the mixing bowl. It starts the leavening. Then, in the oven, the second action begins. It continues the leavening. Up!... up!... it keeps raising the batter and holds it high and light. Your cake bakes beautifully, even though you may not be able to regulate your oven temperature with utmost accuracy. Another delightful advantage—Calumet's perfectly controlled leavening action permits you to store cake batters until you are ready to bake them. Batter, poured into the baking pans, covered with a damp cloth and waxed paper, may be kept in the refrigerator for several days without loss in quality. Think of the convenience!

All baking powders are required by law to be made of pure, wholesome ingredients. But not all are alike in their action or in the amount that should be used. And not all will give you equally fine results in your baking. Calumet is scientifically made of exactly the right ingredients, in exactly the right proportions to produce perfect leavening action. Double-Action, your assurance of baking success. That is why Calumet is the largest selling baking powder in the world to-day.

Get a can of Calumet and try the recipe given here. Notice how little Calumet it calls for. The usual Calumet proportion is even less—only one level teaspoon to a cup of sifted flour. A splendid economy which the perfect efficiency of Calumet's leavening action makes possible.

FREE—New Baking Book! You'll find recipes for all the good things shown on this page in the new Calumet Baking Book. A wonderful collection of novel cakes and quick breads. Mail coupon—TO-DAY!

CALUMET

The Double-Acting Baking Powder

A Product of General Foods Corporation

MARION JANE PARKER, C. O. Calumet Baking Powder Co., (Inc.)
4130 Fillmore St., Chicago, Ill.

Please send me, free, a copy of the new Calumet Baking Book.

Name _____
Street _____
City _____ State _____

Fill in completely—print name and address.



PLUM ROLLS

1 cup flour
1/2 cup Calumet
1/2 cup water
1 egg
1/2 cup butter or lard
1 cup plums, drained

Sift flour once, measure, and baking powder and salt, and sift again. Cut in shortening. Add milk gradually until soft dough is formed. Roll 1/4 inch thick on floured board. Cover with plum sauce. Roll in long roll, pressing edges together. Cut into 1/2-inch slices. Place in greased pan and pour plum sauce made from plum juice and water, thickened and sweetened over them. Bake in hot oven (325° F.) 30 minutes, basting often. Serve hot, with sauce poured around them.



FREE
NEW CALUMET
BAKING BOOK

DODGE BROTHERS SIXES AND EIGHTS

UPHOLDING EVERY TRADITION OF DODGE DEPENDABILITY

Over all kinds of roads in all kinds of the industry today. » » Brakes are weather-
weather, the Dodge Six performs depend-
ably. » » It has power, smoothness and proof internal hydraulics . . . always equal-
rugged strength for the hard service farm- ized, always dependable, always positive.
owners demand. Matching the sturdy chassis In this six, Dodge Brothers give the farmer
a bigger value today than ever before—

is a Mono-Piece Steel Body

. . . exceptionally roomy,
silent, safe—the strongest
body construction known to

DODGE SIX
\$ **835**
AND UP. F.O.B. FACTORY

for this modern, roomy,
capable car is the lowest-
priced six that Dodge
Brothers have ever offered.



© 1930 by Dodge Brothers Corporation



The WIRES you never see . . .

The convenience and economy of electricity, your home servant, depend largely on the electric wires behind your walls. Only when the wiring is well planned—providing for handy wall switches and plenty of outlets—can you take full advantage of electric lights, floor lamps, irons, fans, and all the labor-saving appliances. *Electric service can go only as far as the wires that carry it.*

When the home and farm buildings are first wired—or when the wiring is extended—keep in mind that it doesn't pay to scrimp. Adequate, well-planned

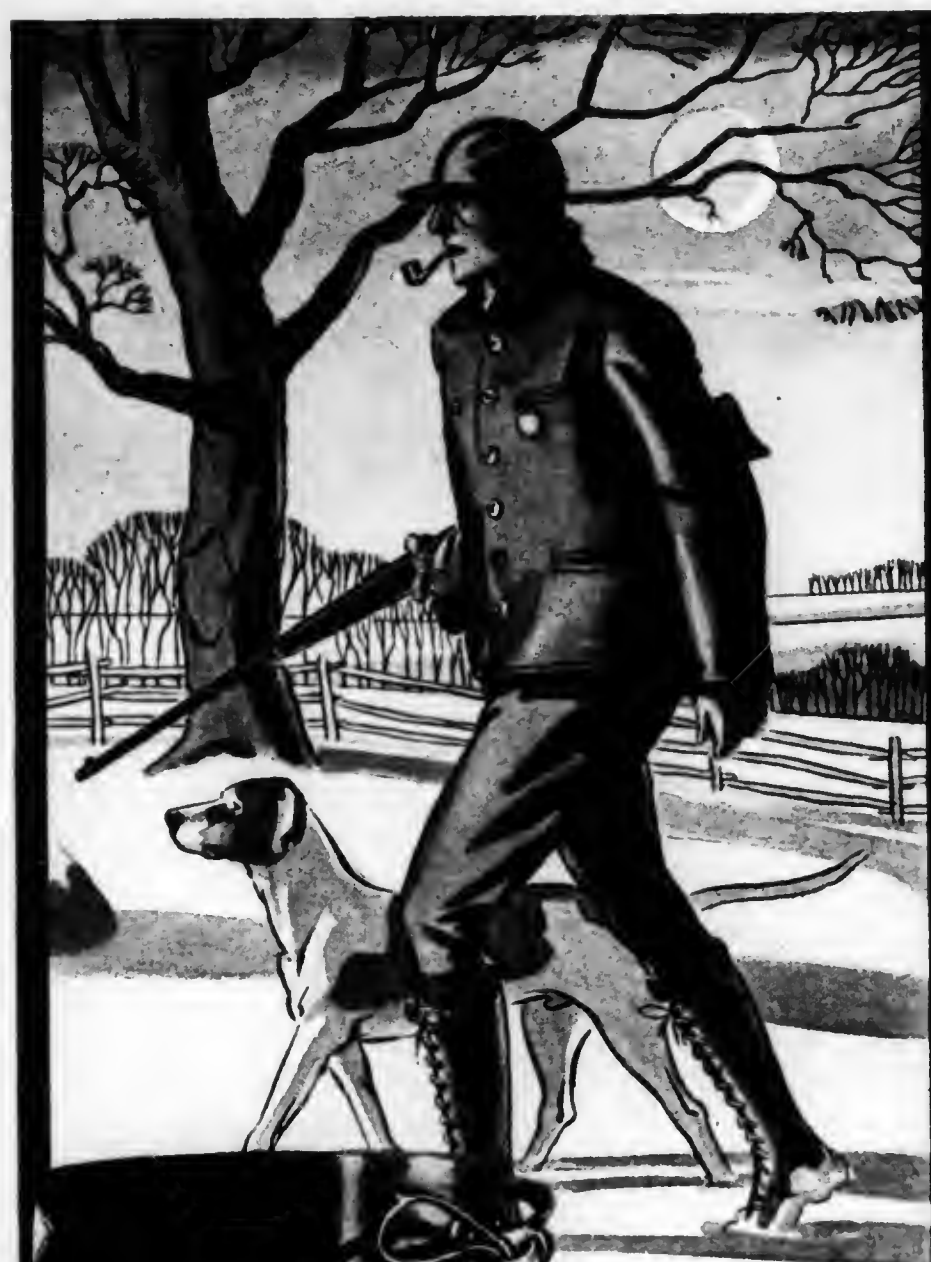
wiring costs little and soon pays for itself in the added comfort and saving of time and work.

The G-E Wiring System has been designed by experts to provide the greatest convenience and safety. Only materials of the highest quality are used. It permits the most economical and satisfactory use of MAZDA lamps and electric fans, vacuum cleaners and refrigerators, Hotpoint ranges and heating appliances, and every other electric device. And it brings you running water in the house and the dairy. Ask your power company about the G-E Wiring System.

GENERAL ELECTRIC

Join us in the General Electric program, broadcast every Saturday evening on a nation-wide N.B.C. network

THE HOOD DEERFOOT



THE HOOD DEERFOOT—A waterproof service boot, trim and neat, and comfortable as a custom-built leather field boot.

Send for the Hood booklet on Farm Footwear
HOOD RUBBER COMPANY, Inc.
Watertown, Massachusetts



A waterproof, service boot as trim and neat as a custom built leather field boot . .

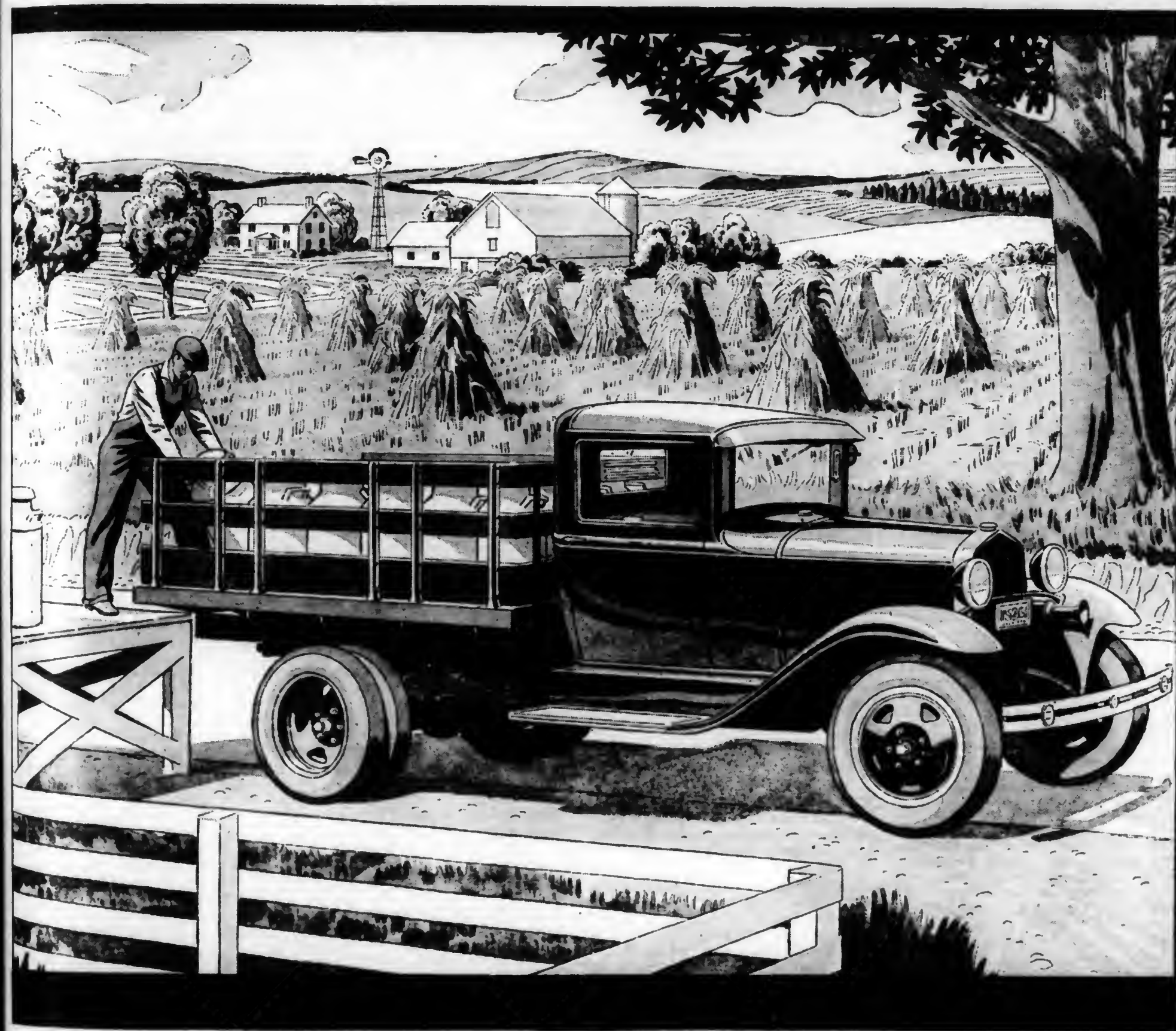
AROUND the farm—on your hunting trips—when you go into town, wear the Hood Deerfoot and your feet will be warm and dry no matter what the weather is. And they'll look as well and be as comfortable as in a pair of expensive leather boots.

The Deerfoot is made of the highest grade rubber stock with heavy grey tire tread soles. Warmly lined with a fleecy knit fabric. Slim and trim in appearance and with all the style of a custom built shoe. The ideal boot for all sorts of rough going and for wear in mud, water and through wet brush and stubble.

There's only one real Deerfoot—the Hood. You can easily identify the genuine by the Hood Arrow on the back of the boot.

Hood makes a complete line of boots, arctics and rubbers for every member of the family and for all work and dress occasions. Ask for them by name—Hood.

For each day's work on a farm The Ford Truck gives good service



THE Ford 1 1/2-ton truck is strongly built of fine materials, with parts of simple and rugged design. The extensive use of special steels and fine forgings, and the use of more than twenty anti-friction ball and roller bearings, all contribute to the long life and reliability which it offers.

The Ford truck will give you service that is faithful, tireless, and profitable . . . and it can do all of your hauling at remarkably low cost.

A number of features increase the usefulness of the Ford truck, adding as well to its capable performance and rugged strength. Among them

is a large-sized opening provided in the transmission to accommodate a power take-off mounting. Thus the engine can furnish power for winches or other equipment mounted on the truck.

Other features are the spiral bevel gear rear axle with straddle mounted pinion; the option of two gear ratios; the large brakes; 4-speed transmission; heavy front axle and spring.

Bodies are strong, of good appearance, and have ample loading-space. Go to your nearest Ford dealer today, and let him show you how economically the Ford truck can serve your purposes.



THE HOOD DEERFOOT



THE HOOD DEERFOOT—A waterproof service boot, trim and neat, and comfortable as a custom-built leather field boot.

Send for the Hood
booklet on Farm Footwear
HOOD RUBBER COMPANY, Inc.
Watertown, Massachusetts



A waterproof, service boot as trim and neat as a custom built leather field boot . .

AROUND the farm—on your hunting trips—when you go into town, wear the Hood Deerfoot and your feet will be warm and dry no matter what the weather is. And they'll look as well and be as comfortable as in a pair of expensive leather boots.

The Deerfoot is made of the highest grade rubber stock with heavy grey tire tread soles. Warmly lined with a fleecy knit fabric. Slim and trim in appearance and with all the style of a custom built shoe. The ideal boot for all sorts of rough going and for wear in mud, water and through wet brush and stubble.

There's only one real Deerfoot—the Hood. You can easily identify the genuine by the Hood Arrow on the back of the boot.

Hood makes a complete line of boots, arctics and rubbers for every member of the family and for all work and dress occasions. Ask for them by name—Hood.

HOOD MAKES CANVAS SHOES • RUBBER FOOTWEAR • TIRES • RUBBER SOLES AND HEELS • RUBBER FLOOR LING

September 13, 1930

PENNSYLVANIA FARMER

(223) 15

For each day's work on a farm The Ford Truck gives good service



THE Ford 1 1/2-ton truck is strongly built of fine materials, with parts of simple and rugged design. The extensive use of special steels and fine forgings, and the use of more than twenty anti-friction ball and roller bearings, all contribute to the long life and reliability which it offers.

The Ford truck will give you service that is faithful, tireless, and profitable . . . and it can do all of your hauling at remarkably low cost.

A number of features increase the usefulness of the Ford truck, adding as well to its capable performance and rugged strength. Among them

is a large-sized opening provided in the transmission to accommodate a power take-off mounting. Thus the engine can furnish power for winches or other equipment mounted on the truck.

Other features are the spiral bevel gear rear axle with straddle mounted pinion; the option of two gear ratios; the large brakes; 4-speed transmission; heavy front axle and spring.

Bodies are strong, of good appearance, and have ample loading-space. Go to your nearest Ford dealer today, and let him show you how economically the Ford truck can serve your purposes.



THE YOUNG PEOPLE

Darkest Hour Before Dawn

Final Chapter Written by Jacqueline Parsons, Pennsylvania

Editor's note:—Two weeks ago we read the thrilling first installment of this story, written by Helen Kirkheart. Our readers were to finish the story, prize to be given to the one whose story was published. I am sure you will agree that Jacqueline has given us a thrilling ending.

This has been so much fun I am wondering if we can't try it again. Send in the first installment of a story and our readers will write the ending. Prizes for all stories published. Send your letters to Young People's Editor, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

Of course, we pushed and tried to open it but it remained shut and all we could do would not budge it. I was on the verge of tears and I knew Bert was scared too.

"What made you run?" said Bert after a silence.

"You startled me and I thought I saw something black in the corner. Turn on your flashlight," I said, for we had dropped ours in our rush for the door.

There was silence and then he flashed on the light. I knew that it took a great deal of courage, but I did not know how much then. The light turned full on a statue of black marble in the corner. We were both relieved. Then we tried to open the door again but it was impossible.

"This is a mess," said Bert with a whistle. "hunt around for an opening. Ruth, we've got to get out, we can't live on furniture no matter how fine."

We both hunted but couldn't find it. At last I wearily sank down on the floor and leaned back. Suddenly the wall behind me gave way and I fell back. I instantly got up and Bert's flashlight revealed a passage, which beyond the glow of light looked dark and forbidding. But to us it was a way out and we started to follow its course.

Ruth in Despair

What windings and twistings and steps and hills and narrow places where we could just creep through. The passage was drafty and damp and our dancing silhouettes which were cast flickering on the rough walls were eerie. I pressed closer to Bert and wondered if we would ever get out. Suddenly we heard again the muffled screams which immediately died away. I was very much frightened but Bert firmly clutched my arm and we pressed on. After about a half a mile I was in despair.

"We will never get out," I sobbed. And sinking down covered my face with my hands and began to cry. Bert looked uncomfortable and tried to cheer me up.

"Come on Ruth, we'll get out, don't cry. It looks pretty bad but I'll go see if I can find a way out."

He left me sitting wearily on the floor of the passage. After I had waited what seemed to be a very long time and still he did not come. I was becoming very much frightened when I heard a shout which echoed through the cave. I jumped up, my weariness forgotten and ran down the passage in the direction of the voice. I reached him in a short time. He was standing on one side of a great heap of earth and up above it was a hole through which the last dying light of day peered through.

"Here's a way out," cried Bert. "Come on."

I was about to climb out, an easy matter because of the slope of the earth, when I noted the freshness of it and remembering the muffled screams, it occurred to me that some one might be caught by a cave-in. I

looked at Bert who had stopped also and was looking thoughtfully at the heap.

"There may be some one under it Bert. Remember the screams of the passage?"

"That's just what I was thinking, Ruth. Come on and help me dig them out, let's hope it won't be too late."

I got down on my knees and we started digging feverishly with our hands delving deep into the earth. We worked very fast and soon our diligence was rewarded by a shoe of black leather. I gave a little gasp of amazement, for it was Helen's shoe!

"Helen," ejaculated Bert. He took hold of her foot and together we pulled



These boys completed a tour of 7,100 miles to the West in a new truck.

ed her out, but a nameless fear began to take hold of me. Where was Bill? We dug a little further and it revealed Bill's hand. We dragged him out also and took them both up on the grass and loosened their clothes. Their hearts were both beating faintly, but they were pale and unconscious.

"Oh dear, why won't they come to?" I cried in desperation.

"They need medical aid," said Bert, an anxious frown on his face. "there is some smoke just over the brow of the hill, run for help quick, Ruth."

I needed no second bidding and was off. When I got over the hill I saw a small station which I ran to with all my speed. Bursting into the station breathless and excited I told the story that set a little company of men and women with a medicine case back with me. When we got there Bill was conscious and was sitting up though rather pale. They were attended to and we were sent back on the train to Southville five miles away, where we were met by our anxious parents, they having been telephoned of our rescue. They were too relieved of our safety to scold us.

A Gold Mine

Bert and I were both utterly exhausted and Helen and Bill were very weak. They said they had simply followed their cave which grew narrower and narrower when suddenly the ceiling had caved in. They had screamed and screamed but the earth kept tumbling down and in a few minutes they were completely buried. It got in the papers, which also stated that the passage was an old gold mine as they had found a pick and evident signs of gold. It was evidently only a pocket and had probably lasted only eleven months at most.

The story we joined together was that some one had got lost and discovered gold and fearful that others should discover his secret had built his home near the pocket in the

cave, sneaking out to get necessities at a faraway town and that an explosion or cave-in had killed him. That that some one was Joe McPherson we all believed and a year afterward it was confirmed by an old diary of Uncle Jim's who lived in a town and kept a furnishing store ten miles from Southville, stating that a peculiar person used to come every month and buy his most expensive wares, paying for them in gold nuggets. As far as Uncle Jim could make out the stranger's name was Joseph Monroe. As this was the middle name of Joe McPherson it proved that it was indeed he.

Thus ended the mystery of the cave where we so nearly added another tragedy to its list.

(The End.)

Honorable mention must also be made of Louis McConnell's excellent ending of the story. We're sorry space won't allow us to print his story but he is also receiving a prize.

A "Thank You" Letter

I SURELY was surprised this morning when I went out to the mail box, for there was a package from the Pennsylvania Farmer for me. I like Indian stories, so "The Gold Cache" and "The Quest of the Fish-Dog Skin" both appeal to me. Dad and Mother are as pleased with them as I am.

I'm holding Jerry our dog in my lap now. He was an honored member of the family today. This morning at two o'clock he wakened us up by barking. On investigating the cause Dad found that our cows were out, one ready to start for the cornfield. Jerry went with Dad, helped him put the cows into the barn and, when he saw they were tied, walked back to the house.

Little Folks' Corner

Timmy Twitchet Has Visitors

By RUTH PLUMLY THOMPSON

THE fame of Timmy's house spread and spread. No wonder! Why, you have no idea how fine that doll house looked after Timmy had painted and fixed it up. As for the interior, I can only say it was charming and let it go at that. The automobile standing always ready at the door gave it the most distinguished air possible, and Timmy had hired a young mouse from the country to run the car and act as butler, so that altogether his establishment lacked nothing in style or comfort.

The surroundings were delightful, such a pleasant outlook. An old bird cage and a spinning wheel occupied the space in front and the bandbox mountains at the side were wonderful. The light from the garret window streamed in cheerfully, and never, I believe, was a mouse gentleman more cozily domiciled.

But, of course, no one can have a

I haven't contributed much to our page this summer but I hope I will do better this winter. I seem to have more time to write at school than I do in vacation. Mary Jane Barber.

Future Farmers Tour West

THIS group of Arendtsville, Pennsylvania, vocational boys just completed a 7,100-mile tour of the Far West and Canada. Their trip took in Cumberland Valley; Morgantown, West Virginia, where they saw the State University; Columbus; Lexington; Mammoth Cave; Crystal Cave; Indianapolis; Charleston; St. Louis; Kansas City; Manhattan; Denver; Colorado Springs; Garden of the Gods; Pikes Peak; Canyon City; Royal Gorge; across the desert to Salt Lake City; Pocatello; through the Yellowstone National Park; Great Falls; Glacier National Park; through the provinces of Alberta, Saskatchewan and Manitoba; then south to Fargo; St. Paul; Chicago; Detroit; Niagara Falls; Erie; State College and home.

The following boys and their Supervisor of Agriculture, Mr. Edwin A. Rice, made up the party: Lester Kint, Clarence Fritz, Sterling Sell, Guy Martz, Charles Weaver, Roy Tate, Richard Warren, Clair Raffensperger, Charles McDannel, Herman Hartman, Harold Cole, Paul Showers, Herbert Orner, Richard Guise, Burton Wolf. These boys are members of the South Mountain Chapter of the Future Farmers of America, which is a national organization of vocational agricultural boys.

Truck Purchased by Boys

The trip of 7,100 miles was made in a new truck which was purchased by the boys. Seats were built in and a canvas top was provided to protect them from the sun and rain.

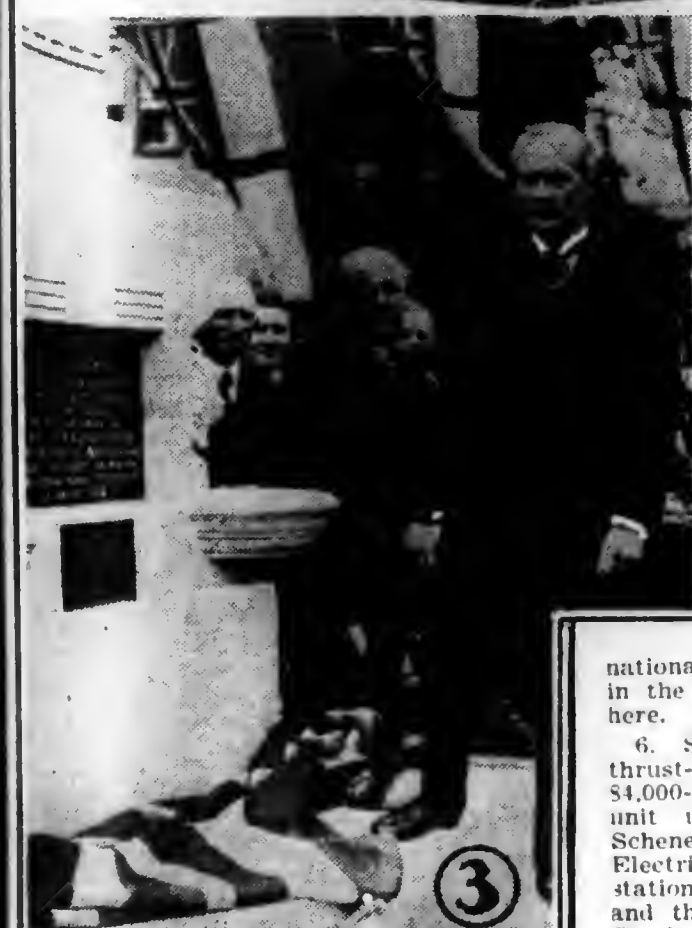
Mr. Rice stated: "It was entirely a cooperative enterprise. We earned this money cooperatively and spent it cooperatively." For two years these fifteen boys and their agricultural supervisor carried on group projects to finance this trip. Ground was rented two years ago and a group project of three acres of potatoes were planted, cared for and harvested by the boys. On this project the boys cleared \$300. This year their project consisted of three acres of beans. These were planted, cared for and harvested before starting on the trip. On this project they cleared \$180. The total cost of the trip was about \$600.

The boys took with them their own provisions, camped out and prepared their own meals. This helped to reduce the cost to approximately \$38 per day.

PASSING EVENTS IN PICTURES



1. The United States Department of Agriculture has found that cutting corn-stalks at the level of the ground instead of five or six inches above the surface is an effective means of controlling the corn borer.



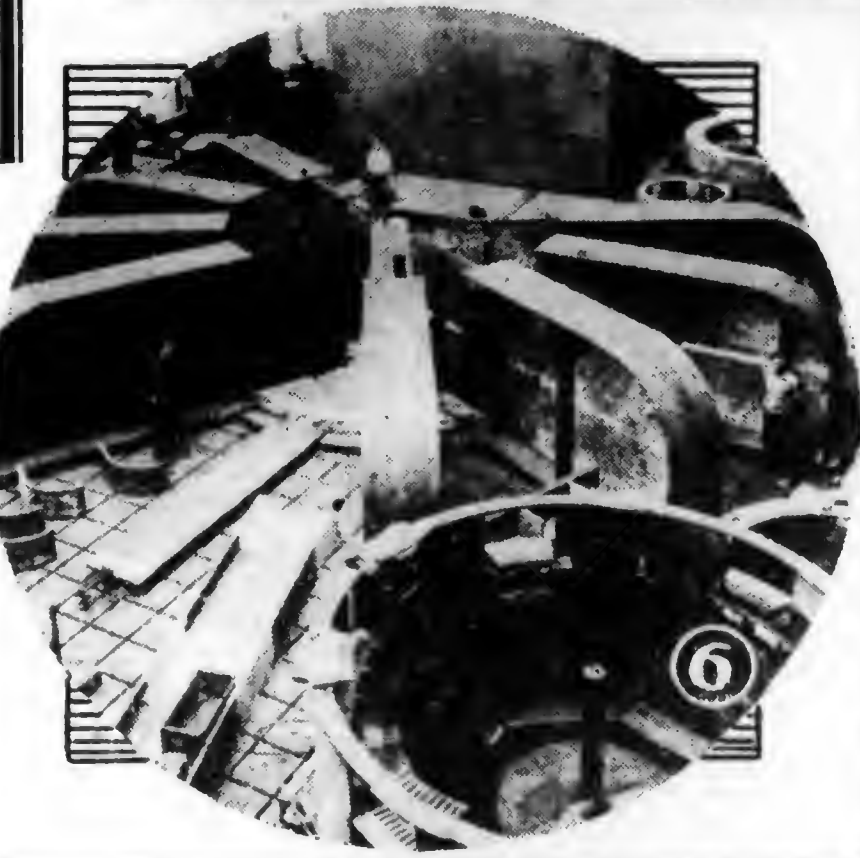
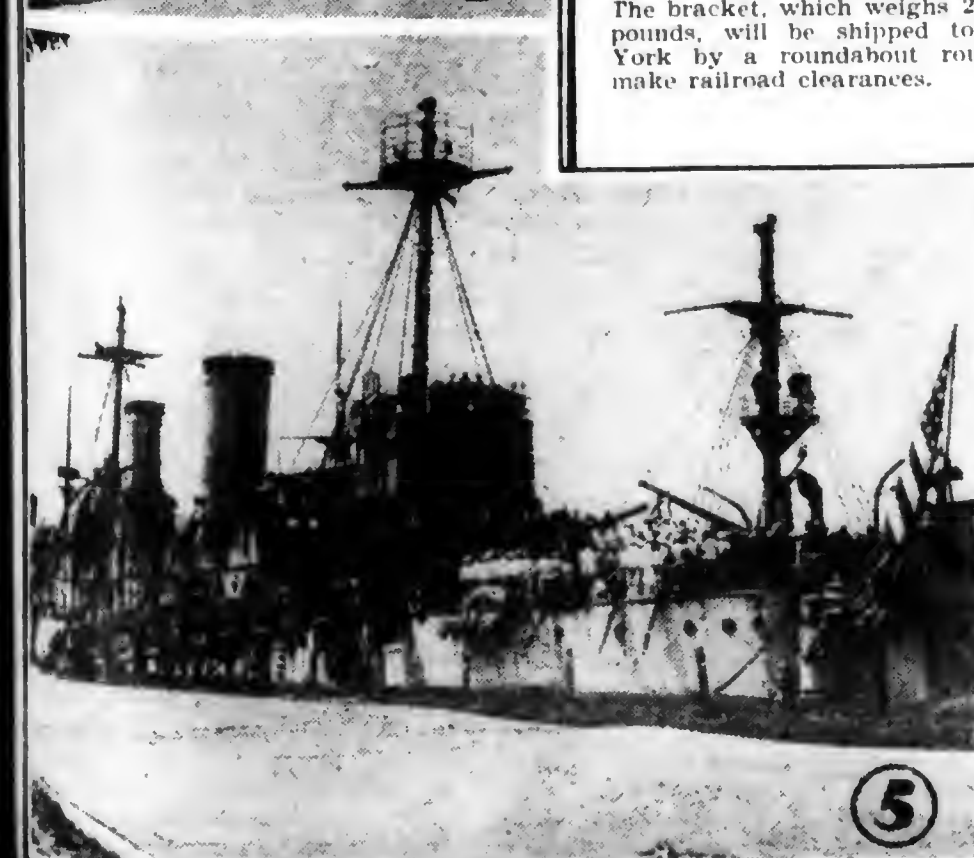
2. The most recent portrait of Dan Carter Beard, national commissioner of the Boy Scouts of America, who has accepted the post of honorary president of the Craftsman's Guild, a new organization devoted to the stimulation of better craftsmanship among American boys.

3. Carmarthen, England.—Sir A. Whitten Brown, the first man to fly across the Atlantic, after unveiling the fountain memorial to Miss Amelia Earhart of Boston, the first woman to cross the Atlantic by plane.

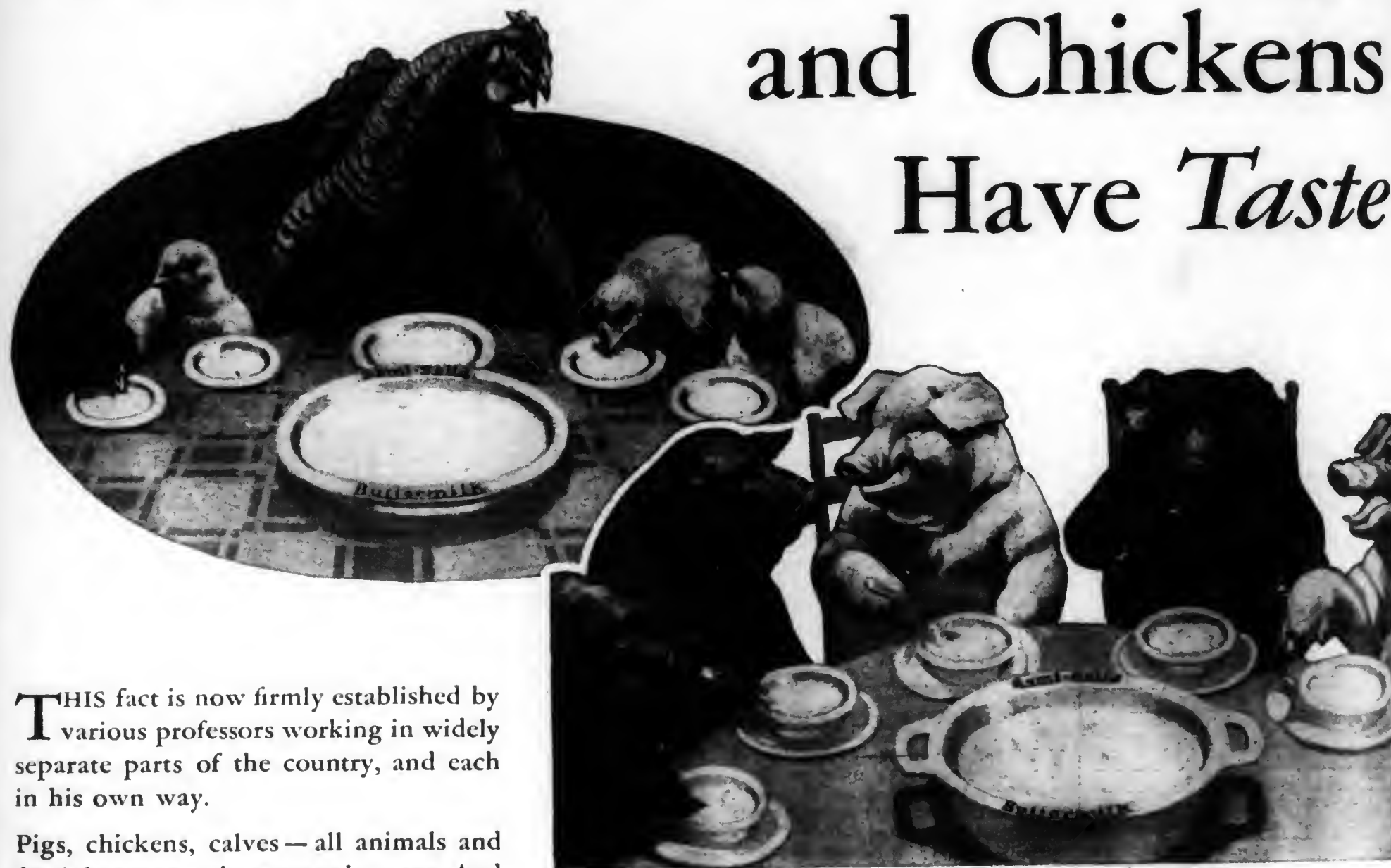
4. The Shamrock I, the first of the famous yachts which Sir Thomas Lipton has built to capture America's Cup, now sought by the Shamrock V. This yacht lost to the U. S. entry Columbia in 1899.

5. Philadelphia. A full view of the Olympia with the survivors of the Battle of Manila Bay on board during the 32nd national reunion and exercises held in the League Island Navy Yard here.

6. Schenectady, N. Y. The big thrust-bearing bracket of an \$4,000-horsepower water-driven unit under construction at the Schenectady works of General Electric for Dnieper River power station in Russia. This is but one and three-quarter million pounds. The bracket, which weighs 235,000 pounds, will be shipped to New York by a roundabout route to make railroad clearances.



Science Discovers That Pigs and Chickens Have *Taste*



THIS fact is now firmly established by various professors working in widely separate parts of the country, and each in his own way.

Pigs, chickens, calves — all animals and fowls have taste, the same as humans. And if given a chance, they will select their food very much as humans do. One famous authority even goes so far as to say that chickens will make a better selection for themselves than humans will make for them. This authority runs a chicken cafeteria where a hen may walk down the line and select what pleases her most.

In their work along this line these authorities have made a second very great and very important discovery, which is probably the most interesting thing yet developed in the world of fowls and animals.

This discovery is that Semi-Solid Buttermilk, especially amongst pigs and chickens, seems to have the highest taste appeal of any food. They say you can scatter a dozen different rations on the ground, together with Semi-Solid, and the herd or flock will invariably be gathered around the Semi-Solid.

Now, the interesting part of this is that every feeder of pigs and chickens has known for a number of years that Semi-Solid Buttermilk was a very vital factor in his feeding problem. Very few prize herds or flocks have ever been raised without a good percentage of Semi-Solid with their feed.

But what they did not know is that these same pigs and chickens, if given a chance, would make the same selection for themselves.

Today, the Consolidated Products Company alone is called upon to supply **OVER ONE HUNDRED MILLION POUNDS A YEAR OF SEMI-SOLID BUTTERMILK** and to maintain seventy different plants throughout the country to supply the present demand which these great discoveries have created.

Apparently from all tests, both in universities and amongst the large feeders of herds and flocks, the adding of Semi-Solid Buttermilk to any good regular feed creates development far in excess of what might be expected from the comparatively small amount that is necessary to be fed.

In fact, the amazing results are so out of proportion to the small amount necessary to be fed as to become a new puzzle to the scientific world.

The answer will probably be found in the fact that buttermilk acts as one of the greatest aids to digestion in the world of humans as well as of fowls and animals. And, therefore, that its strangely interesting taste-appeal amongst our flocks and herds is not an accident.

Today, they tell us, both at the great feeding stations and at the universities, that any kind of feed for flocks and herds is immeasurably increased in value by an added ration of Semi-Solid Buttermilk.

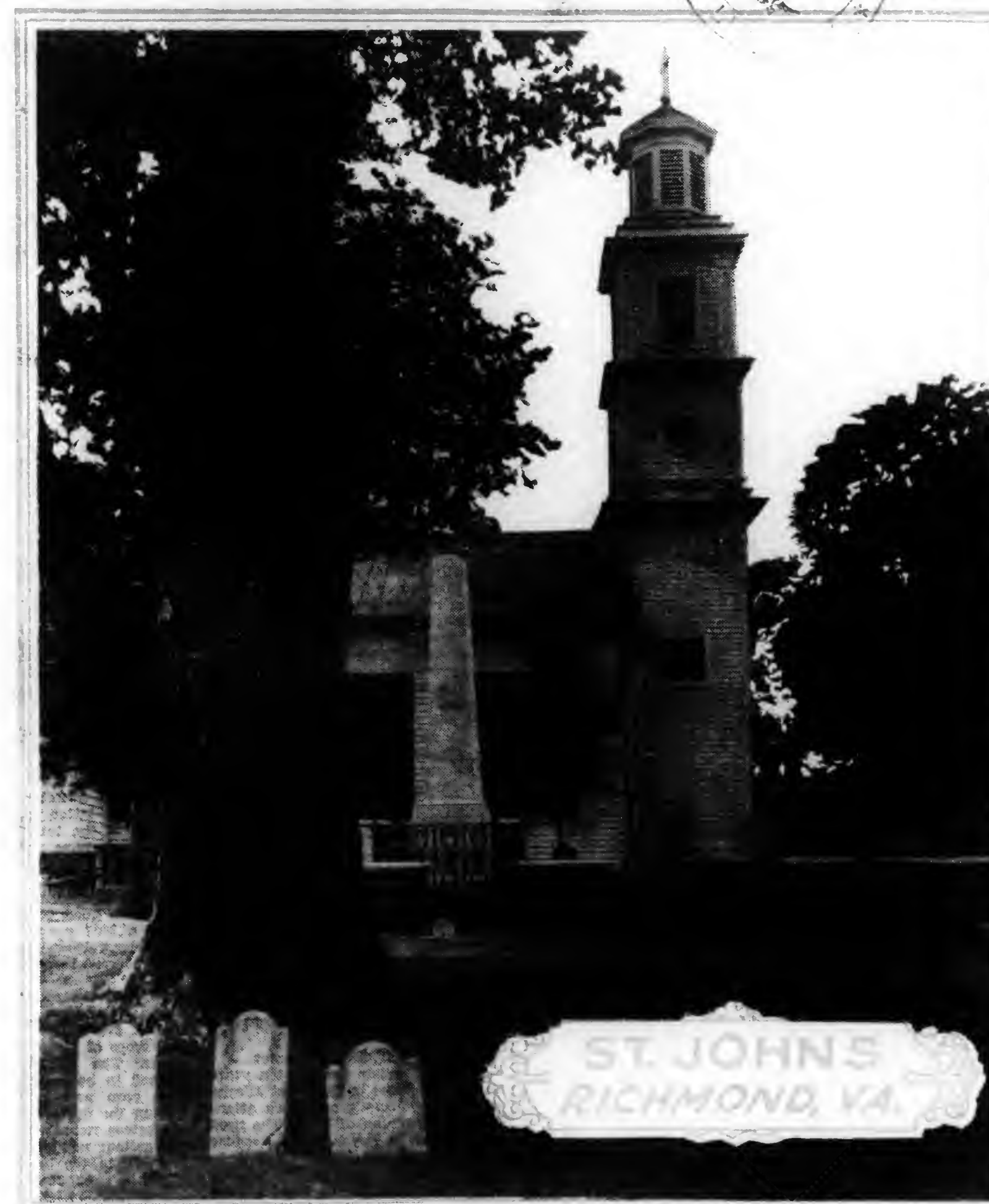
PENNSYLVANIA FARMER

Published Weekly

Established 1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

September 20, 1930



Philadelphia

Pittsburgh

Harrisburg

Farm Facts and Fancies

By ALVA AGE

Make your layers profitable by feeding Lay or Bust, the original dry mash—for a quarter century a leader among Park & Pollard's famous feeds.

There is only one Lay or Bust... Park & Pollard's.

Complete list of Park & Pollard Feeds

Poultry Feeds: Lay or Bust Dry Mash · Red Ribbon Scratch · Growing Feed · Intermediate Chick Feed · P & P Chick Scratch · P & P Chick Starter—Dairy Rations: Overall 24% · Milk-Maid 24% · Bet-R-Milk 20% · Herd Health 16% · Milkade Calf Meal—Other Feeds: P & P Stock Feed · Bison Stock Feed · Go-Tu-In Pig and Hog Ration · Pigeon Feed · P & P Horse Feed · Pocahontas Table Corn Meal.

A GREAT number of well-known people are advising us how to act so that the return of prosperity may be encouraged. A distinguished gentleman of New England, whose syndicated letter to the public is published six times a week, believes that well-paid workers should buy rather freely at this time to increase the demand for products of others' labor and help solve the unemployment problem. That sounds good. Again he thinks that we should be putting money into life insurance which would absorb much that could have been spent to keep the wheels of industry going. That sounds good.

We are told by some advisers that we have been living too fast and should be content with old clothes and old cars until we have the cash to pay for new ones. That sounds good. We are told that pessimism on the part of the buying public is the undoing of manufacturing, which in turn deprives laborers of a living, and that if all of us had faith in our country and went ahead buying matters would righten quickly. That sounds good.

In the Meantime

The individual must look out for himself. That is a selfish statement, but it is in the order of things that one do a good deal for himself. If he did not it would not get done. His old clothes are more comfortable than a new suit, and they save him money until a hole wears in his pocket. He may sincerely believe in reducing the acreage of crops, but individually he cannot afford to reduce until there is reason to believe that enough more farmers will do the same to provide him with a higher price for what he has to sell. It is a pity he must be so self-centered. His soul will dwindle if he retains no broad-gauge sympathy for his fellows, but the first claim on his sympathy is held by those to whom he is indebted. When he is sure they will get their money he can broaden out a bit.

Lime and Clover

A leaflet from the Indiana Experiment Station states that one-half of the soils of Indiana have become so acid that clover fails regularly. Some of our readers recall the time when a few eastern states awakened to the fact that their wide-spread clover failure was due largely to soil acidity. We knew the value of clover, and continued to buy seed to sow in the wheat because the clover seemed so necessary, but stands grew poorer and the outlook was disheartening. Heavy liming of limestone and other soils to increase yields of grain and grass is a very old-time practice, but any relationship between soil acidity and clover failure was not uppermost in the minds of our farming advisers.

The Ohio Experiment Station was a leader in giving wide publicity to the connection between the two, as shown by the results of its tests at Wooster. This work was worth more than the Station has cost since it was established. Later the Illinois Station, through the work of Doctor Hopkins, forced wider attention to the need of lime applications to much farm land. Many other stations did likewise.

The Need Grows Greater

It is only within the last ten years that some states in the great Mississippi Valley have given much attention to the liming of land. The need was slower in development because the land had not been subjected to cropping as long as in the East. Then, too, large areas in the Middle West are naturally very rich in lime. The outstanding fact is that the acreage needing lime in the United States grows greater annually, and lime application becomes a normal item in costs of crop production.

Lime leaches, it goes into unavailable forms in the soil, and it leaves

fields in crops and pastured animals. Most legumes fare badly without lime, and legumes are a necessity in American farming. Bluegrass cannot have it in liberal quantities, and that is true of most other crops so far as maximum yields are concerned. The practice of liming has come to stay, and the need becomes more widespread year by year.

Seeding to Wheat

It is not our eastern farms that are responsible for the wheat surplus, but it is the great areas farther west that have been increasing acreage. Some wheat in the old eastern crop rotations is needed, and almost regardless of market price, the surplus has come from the Middle West and the Northwest, and can be materially reduced only by the action of the growers in those areas. Any reduction in the East, interfering with established crop rotations, would affect the price situation in any material degree. That is to say, no rests upon the eastern farmer to change established practice, and the only question is what will work most profitably on his own farm.

Why Argue?

All truth may need statement, but all important truth needs much statement. A man's opinion of what truth is has a right to statement, and if he knows anything about the subject he has a right to repeat what he said. England's plan has been to let any man who has any theory put up on a soapbox in a park and pound it to the crowd that may be willing to listen, no matter how how subversive to government or the established order of things it may appear to be. The country gets a direct action from people who are rebellious about the existing order when it lets them do a lot of talking.

But why argue? A discussion is not at the facts is needed on every hand, but an argument made to gain a point over the other fellow results only in confirming each in the state he has taken. One is tempted to put his case strongly as possible, and the other comes to believe his own statement. Why cannot one be content to have his convictions and state them as they are, and be glad others have the same privilege? The actual truth may lie somewhere between anyway.

Delaware Notes

CANNING factories which opened the first part of August in the vicinity are now running at full force. Greenbaum Brothers, one of the largest canning factories in the state, so far has had a very good pack, and the season is not expected to close before the latter part of September.

Most of the tomatoes in this section which have not been grown under contract are finding a ready market in Baltimore, where they are bringing from 50 to 60 cents. This gives the farmer a good profit, and if better than a half normal crop is raised he will receive what he has practically received in past years.

DUE to the recent rains the taloupe crop is still being harvested. Never before has there been two crops of string beans and butter beans. The second crop this time seemed to be more tender than the first crop and are more plentiful. During the first crop of butter beans the prices remained around 50 cents per gallon; now the beans are very plentiful in the local markets at 40 cents.

ON THE COVER

St. John's Church, Richmond, Va., which is shown on our cover this week, was the scene of Patrick Henry's famous "Give me liberty or give me death" speech. The church was completed in 1742 and enlarged in 1772.

Cattle Feeding in West Virginia

By W. D. ZINN

TWENTY-FIVE years ago not an animal was fed for the winter or the spring market in Randolph county. Now they are fed by the hundreds and this condition has been brought about by the introduction of silos.

One of the best feeders in this county is Ernest Gaplinger. I asked him to furnish me the report of his cattle feeding during the past winter, and he gave said report below:

Number of cattle fed 20. These were open heifers of common to fair quality. They were on feed 120 days and got oats hay and nothing else for forty days. They ate corn silage and cottonseed meal for 80 days. These cattle weighed when put on feed 1,235 pounds, or an average of 812 pounds. The cattle when sold averaged 1,029 pounds. Average gain per head 217 pounds.

Many feeders put more weight on their cattle, but they have them on all feed part of the time. These cattle were fed oats hay, all they would eat up, for the forty days and 48 pounds by actual weight of silage and five pounds of cottonseed meal daily for the remaining 80 days. They ate from one to two pounds of silage hay along with the silage.

The above report speaks well for silage hay and silage and very well for the feeder. The oats were cut when in the milk stage, which is the proper time to cut oats for hay. In many sections it is more profitable to harvest oats for hay than for the silage.

Wheat and Vetch for Hay

Many letters have come to me asking what I think of wheat and vetch hay. Years ago we grew a great deal of rye for hay, but we found it was not to have good hay the rye must be cut just as it was coming into seed. This was hard to do every season. Weather conditions were often such that we found it impossible to cut the hay on time. We found that wheat would make a little better hay than rye and that we had a longer period in which to cut it.

In order to cause the wheat to hold together better when harvested as hay, we began to add ten pounds of hairy vetch seed to the acre sown to wheat. After we increased this amount, but now believe it will pay to sow 20 pounds vetch per acre. I feared at first that the vetch would make such dense growth that it would smother the clover and alfalfa sown in the mix, but I found this did not happen.

There is one advantage in cutting wheat for hay and that is it is moved from the ground early enough in a good season to produce good crop of clover the same season.

Mr. F. P. Maxwell of Upshur county, who winters over 600 cattle every winter, says when wheat is under \$1 bushel he cannot afford to harvest it for the grain. He is a strong believer in vetch as a hay. By the way, Mr. Maxwell is growing 200 pounds of corn this season, most of which will go into silos. He often feeds about a hundred cattle for the winter market.

Shall He Buy a Farm Now?

It is often said the proper time to buy is when everybody wants to sell. I have never seen so many farms on the market and we may have reached the bottom in prices, but of course I am not sure. It is certainly good time to buy a good farm. If you are a young man and wanted a farm I think I would lose no time in selecting the kind of a farm I wanted. It may be very bad advice, but no man has to follow it. The man who is taking advice from any one who comes along is liable to get into all kinds of trouble.

Make roughage produce more

MILK AND MEAT

WHEN PRICES for milk and meat are low, your feeding costs must come down. Over one-third the feed value of corn, for instance, is in the leaves, husks and stalks. But animals will waste or refuse up to 55% when fed whole. Grinding is the only way to get all the value from your roughage and to make it produce the most in milk and meat. Shredding won't do it—cutting won't do it—only grinding will.

Likewise you can save 10% to 30% of your grain by grinding it. That much passes through the animal undigested when fed whole.

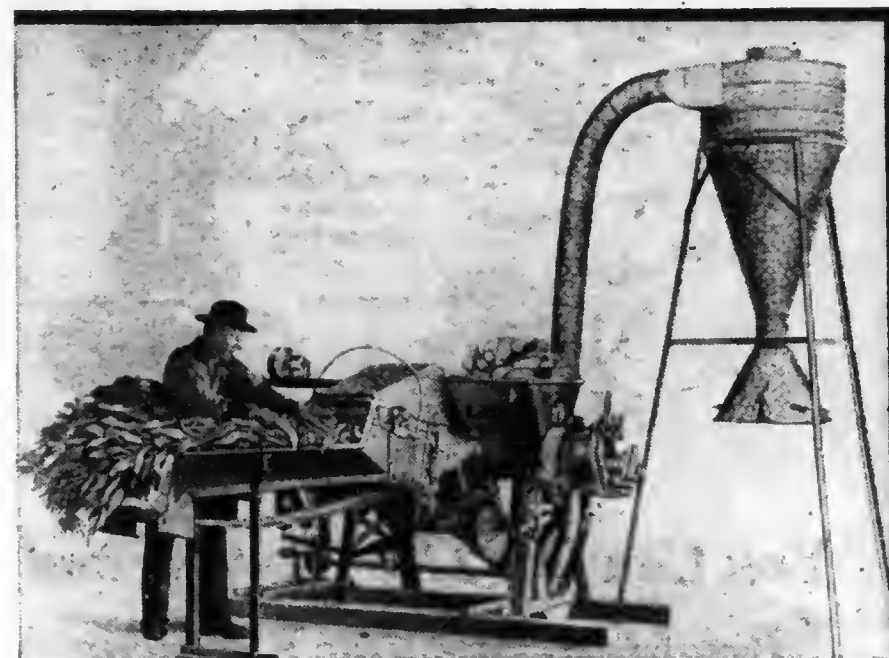
Test after test proves conclusively that when roughage and grain are ground, mixed and fed together in a balanced ration, one-third the feed cost is saved.

And Letz Roughage Mills have proved the most economical and successful way of grinding for more than 100,000 feeders of dairy cows, hogs, beef cattle, sheep and poultry.

With a Letz Roughage Mill you can chop, you can grind, and you can mix. You can do one at a time, two at a time or do all three in one swift operation with only one man. No other mill can do this.

If you feed four or more dairy cows, twenty or more steers, or an equivalent number of hogs, sheep or poultry, you can cut feed costs this year and every year through the Letz system of home crop feeding. You can also release 30% of your feed crop acreage to cash crops or increase the feeding capacity of your farm.

Let 7426 prosperous farmers from every state tell you how they are making money with this proved feeding method. They describe actual experience, give costs, tell results—with every kind of feed and every kind of livestock. Send coupon at once.



Letz Roughage Mill with exhaust fan and feed collector attached. Takes whole bundles and loose hay of any kind. One man and a small tractor or electric motor run it. 4 star for every farm.

WHAT

THE LETZ WILL DO FOR YOU:

1. By re-cutting and grinding stalk, straw and hay, the feeding value of farm crops is increased from 25% to 50%.
2. Releases feed crop acreage for cash crops through increasing feeding value of crops 25% to 50%.
3. The Letz system of preserving feed makes possible a substantial increase in milk or meat production.
4. The Letz system saves up to 25% in labor by reduced acreage, by greater ease in feeding, in elimination of husking, threshing, etc.
5. The Letz system keeps animals in better condition through well-prepared and palatable feeds.

Letz Hopper Mills
This mill will crush or grind ear corn or any grain, damp, wet, or oily, without clogging. Sold for 45 years under a guarantee to grind more feed finer, with less power and less expense for repairs, than any other grinder made. Comes in six sizes—2 to 30 horse-power. Write for booklet.

LETZ MANUFACTURING CO.
935 East Road
Crown Point, Indiana

Without obligating me in any way, please send me the new book of facts written by Letz Mill owners, showing the various ways dairymen and stockmen have increased their profits by re-cutting, grinding and mixing together their feed crops, as proved by their own statements. I am now feeding:

Dairy Cows: _____ Steers: _____ Hogs: _____

Sheep: _____ Horses: _____ H. P. of my Engine: _____

My name is _____

My mailing address _____

(or R.F.D.) is _____

City _____ State _____

LETZ

AMERICA'S LEADING FEED MILL

LETZ MANUFACTURING COMPANY

935 East Road, Crown Point, Indiana

I Want Wagon Men At Once!

I have openings for several hundred steady responsible men in all sections of the country. Income for workers at start will run from \$35 and up per week. I supply all the merchandise on credit. You can make up to \$3,000-\$5,000 a year, experienced men often make more. The work is pleasant, healthful and you are absolutely your own boss. I prefer men with cars but will start ambitious workers who want to work with teams or on foot. Everything is furnished on credit so you can start right out making money your very first day. If you will work and have good common sense you can succeed with me. I supply plans that have helped hundreds of others to succeed. We are a 40-year-old organization and one of the leaders in this field. You need not hesitate to write in full confidence. The more you tell me the quicker I can get you started. Address: Mr. O. A. Ostrom, care of The House of Friendly Service, McClellan & Co., Desk AC-3895, Winona, Minn.

HEREFORD Calf Sale!

30 Steers and 20 Heifers

To be shown and sold at the Kanawha County Fair, at 1 O'clock

WEDNESDAY, OCT. 1, 1930

These calves will average in age approximately six months, and will weigh around 500 lbs. All will be high grade or pure-bred Herefords, and will be halter broken and well started on feed. Fair grounds six miles west of Charleston and one mile west of Dunbar, on Charleston-Point Pleasant Highway, No. 19.

F. C. GREENE, Supt., Kennel, W. Va.
C. I. FOWELL, Auct., Charleston, W. Va.

Quist Herd Dispersal

WEDNESDAY, SEPT. 24th

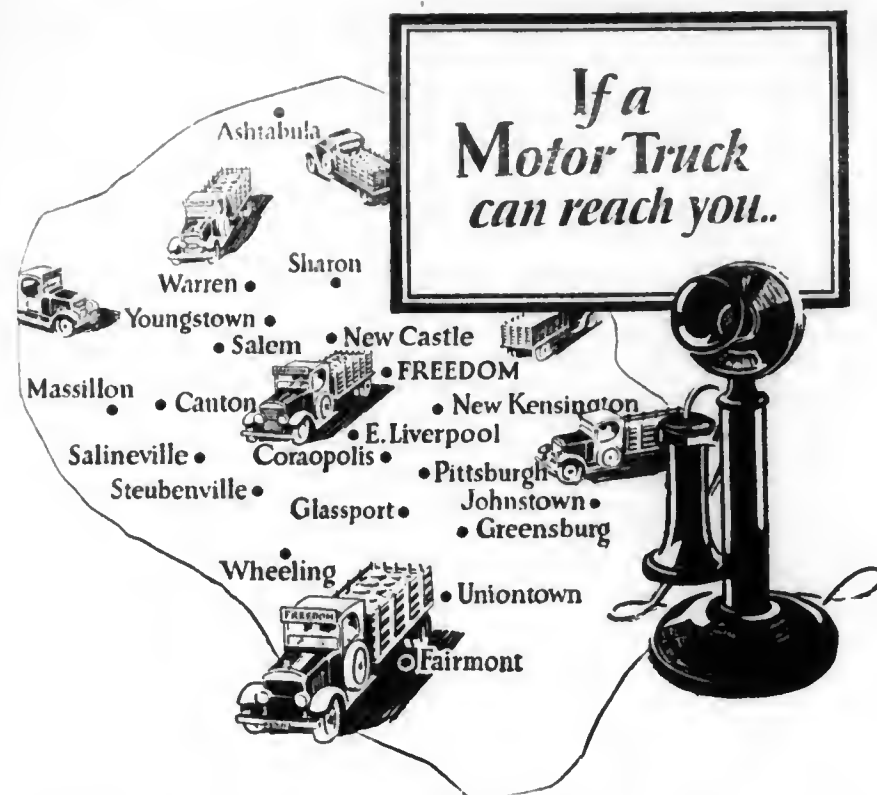
27 First calf Holstein heifers, fresh or soon due, 23 registered, 4 grades. Good producers, some milking 50 pounds per day. 2 bulls out of 1,100-pound sires. Accredited herd, negative to blood test for abortion. Farm machinery, equipment, hay and grain to be sold before dinner. Lunch served. Sale rain or shine. Cattle will be sold under cover. Terms announced day of sale.

Auctioneers: Col. A. W. Cummins & Sons, Houston, Pa.
GEORGE CHELQUIST,
Eighty Four, Washington County, Pa.
Located near Monongahela Pike Route No. 81, 7 miles from Washington, 13 miles from Monongahela, 7 miles from Canonsburg, Pa.

Read the Advertisements

Advertisements give you a high point of view without any climbing at all. They spread world products before you—servants to serve you, conveniences to please—prices low because so many thousands are using the same. They give you a new conception of what you'd like to own. No longer will a watch or food chopper do—but the highest improved watch or food chopper. No longer just a radio—but one of purest transmission. They make you change your mind about what you started to choose, and choose something more pleasing at no higher price. They help you see the whole field of satisfying wares. They lift you to fresh joys.

Please Mention Pennsylvania Farmer When Writing to Advertisers



You Can Get This Cleanest and Brightest-Burning Kerosene

WHETHER used for lamps or lanterns, for cooking, heating or power, Freedom Kerosene, made from 100% Pennsylvania Crude Oil, is better. This superior fuel burns with a clear, clean, hot flame that gives most light or heat per gallon consumed. For tractor or other engine use it has power and pep far beyond that of ordinary kerosene. For use with insecticides, or fungicides, it has no equal.

P.S. And for your Motor Cars Trucks and Tractors
 FREEDOM Ethyl Gasoline
 FREEDOM Golden Gasoline
 FREEDOM Perfect Motor Oil
 FREEDOM Tractor Oils

Everybody cannot get Freedom Kerosene. But if you live in the territory shown above our trucks will make prompt delivery right to your door at no increase in price.

There is a Freedom branch located in every city shown on the above map. Phone or write the nearest branch for a trial order of Freedom, the better grade Kerosene, sold at no extra cost.

THE FREEDOM OIL WORKS CO.
 FREEDOM, PENNA.

FREEDOM KEROSENE

When writing advertisers please mention Pennsylvania Farmer



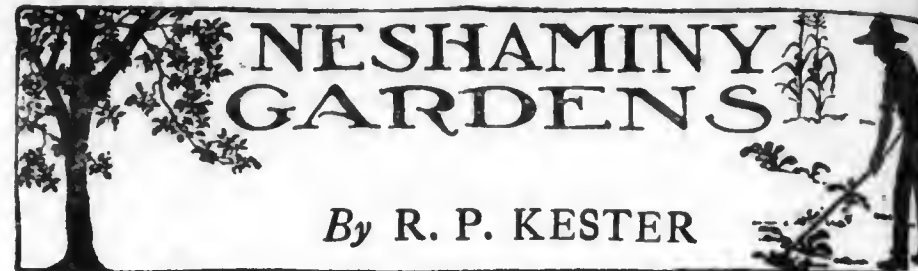
CAN YOU AFFORD NOT TO USE A "NON-WRAP" SPREADER

The best and cheapest fertilizer is manure if applied evenly. The Farquhar "Non-Wrap" Spreader makes the most even distribution of any kind or condition of manure. Positively will not wrap—convenient to load and easy draft. Has many special features long desired by the progressive farmer.

Investigate the strong features of the "Non-Wrap" Spreader.

Ask for New Bulletin No. 930

A. B. FARQUHAR CO., Limited, Box 946, York, Pa.
 Engines — Boilers — Cider Presses — Sawmills — Potato Diggers



By R. P. KESTER

A GAIN I must sound the praises of the quality of the J. H. Hale peach. Without question it is the best yellow peach we ever raised. So far it has not proved itself a prolific bearer, but our Hale trees did better this year than the Elbertas. However, the ravages of the Japanese beetles last year devitalized many of our trees so much that no fair comparison can be made. We find most of the trees in our peach orchard show signs of coming back and it may be they will outgrow the damage done by the beetles. We will give them a severe pruning next spring and see what they will do.

Grapes seem to be ripening a little earlier this year than usual, probably because of the dryer, hotter weather during the summer season. The demand promises to be good. Mrs. Kester's expertness in making grape juice, and her generosity in serving it to neighbors, is working to our advantage. There is no more satisfying and refreshing drink than pure grape juice when properly prepared. It beats any synthetic preparation that can be made, but unfortunately many city people have never tasted the genuine article.

Owing to the long drouth, the preparation of ground for wheat is a difficult matter in many sections. Plowing is almost impossible, and when it is done the soil turns up in hard clods. It might be a good thing if the difficulty should lead to a reduction of the wheat acreage in this country. But wheat growing in our part of the United States is not a business in itself. It is a necessary part in the rotation scheme which makes it difficult to omit or supplant. Probably most of the grass seed is sown in the wheat crop. And again, the straw is a necessary article where livestock is kept in the East. The eastern wheat crop does not affect the nation's production to any great extent.

I related before a process which overcame similar dry conditions and put a field in prime shape for plowing, but it is worth telling again. A field from which an oats crop had been harvested was to be prepared for wheat. But when plowing was attempted it simply could not be done. The soil was dry as a brick. Finally a double disk was hitched to the tractor and this was run over the field. The disk cut up the surface and left a dust mulch one to two inches in depth. The field was left in this condition a week or ten days. It did not rain in the meantime, but when the plow was started again, what was the surprise to see the soil turn over moist and pulverized fine. The dust mulch had stopped evaporation, and capillary attraction had brought sufficient moisture from below to make the soil friable.

The schools have opened again and an army of small soldiers has enlisted in the battle against ignorance. Most of this army of little fellows are conscripts. The confinement of the schoolroom is an experience which most children naturally abhor until they learn what it is all about.

The system of public education as it existed when I taught my first term of school would scarcely be recognized as a "system" today. The term was not much more than half as long, country schools were one-room buildings without exception, the furniture was composed of big dry-goods box affairs, and there was no such thing as uniformity among the self-bought text books. The public felt

that it had done its duty toward letics if it provided a space of ground no matter how full of stumps or trees it might be.

Possibly the cost of modern education is justified by the results. There is one thing I fear concerning those of us who are paying for it, that is that we are expecting too much of it. No school system can give a child all the education it needs in order to become the best possible individual, and parents who lie on their jobs and expect others to do what only they can do are laying trouble for themselves.

I have never been able to understand why what we call education turns the minds of young people away from the things of rural life to business, industry and the professions. That it does is shown by the fact that nine out of every ten country boys and girls who receive a modern education have their affections turned to something else than agriculture, and to town or city life. It because there are greater advantages and opportunities? Or is it something in the process that develops an appreciation of the one at the expense of the other?

The development of machinery and the application of electricity to the needs of the farmer, in great measure, has made the physical inferiority of country homes. This should stop the drift of farms to city if it was merely a question of comfort and convenience. There is a deeper reason than that, that is the desire for a life that demands less physical exertion. For matter how much machinery we have on the farm, there still must be a great deal of manual labor if the farm is to succeed. Does education make us lazy? Or does it make us able to indulge in laziness?

Friendly Talks

By Edgar L. Vincent

A THISTLE under the saddle is a mean thing for a horse. It is fear in the heart of a farmer man.

"I'm afraid I am not going to do anything for my year's work. Does the look so to me now."

Many a farmer said that earlier in the season, and because of the thing in his heart he felt uncomfortable all summer. When the weather was willing the potato leaves and frost nipped the foliage which had escaped the drouth, a young farmer said, "I don't know as I have enough for my own use." And the fear made him blue and discouraged.

But rain came. The brown fields began to revive. The leaves of the potato plants lifted up their heads once more. "Muddling" into a bill, the farmer found something that cheered his heart, and now he is looking forward hopefully to a fairly good crop.

What if we were just to meet the fears at the very front battle line and say to them, "Thus far and no farther?" What if we should let the serve as incentives for better thinking and finer action in every part of our farm work, and especially in the fields which to say least promise? Then we would have turned the thistle under the saddle into a friend forgetting the prick and remembering that the bur which is crushed loses its power to harm us.

MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

PENNSYLVANIA FARMER

Consolidated with
 PENNSYLVANIA STOCKMAN and FARMER
 Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of March 3, 1879.

President - - - Arthur Capper
 Vice-President - - T. D. Harman
 Vice-President - George M. Slocum
 Editor-in-Chief - - E. S. Bayard
 Manager - - - Neff Laing

New York - - - 420 Lexington Ave.
 Chicago - - - 203 No. Wabash Ave.
 Detroit - - - 1632 W. Lafayette Blvd.
 Philadelphia - - 1201 Chestnut St.
 Cleveland - - - 1011 Rockwell Ave.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Pittsburgh, Pa., September 20, 1930

No. 12

The Eastern Shore Potato Section

By J. B. R. DICKEY

WHO who is interested in potatoes may well take a few days to visit the Eastern Shore counties of Virginia. With 70,000 acres of potatoes, grown in two small counties about 70 miles long and averaging only about eight miles wide, one is seldom out of sight of a potato field when passing through wooded areas. Often there are potatoes on both sides of the road extending back for long distances. Lancaster county, Pennsylvania, with an area only slightly smaller than these two Virginia counties, boasts a potato acreage of less than 10,000 acres.

To reach this country, where the potato is so widely king, one may travel down through about 150 miles of Delaware and may make the same trip through eastern Maryland all the way to the Potomac. Soon after crossing the Pennsylvania line, and for many miles, wheat appears to be the principal crop, though one also sees many fields of cattle, fields of can-house peas and other crops and some apples and peaches. The soil varies from a sandy loam or even sand. One of the things which impresses a Pennsylvanian is the absence of extensive farm buildings. The houses are good, but most of the wheat is threshed in the fields and the straw left in stacks.

There are quite a few potatoes grown in the Maryland county around Berlin and Snow Hill, but it is not until one passes Pocomoke City and crosses over into Accomac county, Virginia, that the fields become frequent. Until one passes down into Northampton county, however, there are almost as many acres of sweet potatoes as white potatoes. The farther one goes the more white potatoes he sees and the farther advanced and usual the better they look.

Fertilizer Experiments

A stop at the county agent's headquarters at the Eastern Shore Branch of the Virginia Truck Experiment Station gives an opportunity to secure information and see interesting experiments on potatoes, sweet potatoes, strawberries and melons. Much good work is being done here on fertilizers, insecticides and fungicides. One innovation, which was started quite a few years ago, is the use of most of the principal brands of the standard analysis (7-6-5) sold on the peninsula. These brands were checked with the Experiment Station's recommended open formula.

In former years there was wide variation in the results secured, but recently they have not shown much difference. Double and triple strength material is being tried out with very satisfactory results. Irish Cobbler seed from various states and provinces is being tested and there is even a plot being irrigated by water pumped from shallow wells and allowed to run down between the rows. The common rotation in the Virginia potato counties is a crop of potatoes every year on most of the land. The seed is planted about March 1st.

A ton of 7-6-5 is applied, all in the row, but usually ahead of the planter. The better growers run a cultivator through the rows to mix the fertilizer with the soil before coming through with the planter. Most of the cultivation seems to be done with one-horse workers. The rows were as straight as if laid out by an engineer and the fields seemed entirely free from weeds. The stand this year was generally good, though there is often trouble with rhizoctonia. No spraying is practiced save what little is necessary for bugs. Flea beetles were just beginning to invade the upper county. The only weeders seen were several under a tree on one farm, looking as if some one had been trying to sell them.

To Maintain Organic Matter

Corn is planted between every other row of potatoes in many fields. The corn is well started by the time digging gets under way, and as the crop is largely plowed out with a one-horse turning plow the corn need not be disturbed, but makes a good crop on the fertilizer left by the potatoes.

In order to keep up the organic matter, most farmers sow a cover crop, but the soil is usually too sour for the clovers and the danger of scab is too serious to permit the use of much or any lime on potato land. Some small fields of alfalfa were noticed, but the principal source of roughage for work stock appears to be the tops and blades of the corn which are removed and stacked in little round stacks in the field. A few fields of crimson clover and some of vetch are to be seen, but rye seems to be the principal reliance for winter cover. Since there is little stock and no straw there is little stable manure. Pine needles are raked up in the woods and used as bedding and composted.

The great trouble with the crop this year was the lack of rain. The fine sandy loam soil dries out rather rapidly and the first week in June the fields were all in bloom, or past bloom, with only comparatively few showing anything like good vine growth. Cobblers are grown exclusively and such a delicate variety cannot be expected to make much recovery, even if good rains come promptly. Everything on the peninsula is figured in barrels (165 pounds). Fifty to sixty barrels are considered a pretty good yield with probably four-fifths or three-fourths making first size.

One thing which has made a name for the Eastern Shore crop is the Eastern Shore Produce Exchange's Red Star Brand which has stood for quality and good grading. The Exchange handles a large part of the white and sweet potato crops, as well as much of the seed, fertilizer, etc. It is one of our oldest real cooperative agricultural enterprises, with headquarters in its own fine, two-story, brick building at Onley and branches

at all shipping points. Grading is done largely in the field, the pickers picking up the first grade first and putting them into the barrels in which they are shipped. The seconds are picked up afterwards. Last year, for the first time, some potatoes were machine graded at the shipping point and shipped in sacks.

Some second crop seed is grown in the upper county, the seed for which is kept in cold storage in Philadelphia and Norfolk until it is planted in August. The acreage of second crop seed is said to be decreasing, however, the two objections being that the land used cannot be got into a good cover crop, and also that the second crop seed starts more slowly and is later maturing, thus often missing the best price.

A great deal of the seed used in recent years has been coming from Dakota and Minnesota. Most of it is certified. Six to seven sacks per acre is the usual amount planted.

In spite of having no spraying and labor at \$2 per day, the Eastern Shore grower must get a pretty good price and a pretty good average crop to come out ahead of the game. His fertilizer costs about \$40 per acre, his seed last spring was expensive, picking, done largely by gangs of colored help, costs him 20 cents per barrel and the barrel itself costs 40 cents. Freight to Philadelphia is about 50 cents per barrel, making the picking and marketing costs well over \$1 per barrel, besides commission or actual sales expenses.

A Going Concern

Although most of the farms are operated by the owners, share renting is quite common. The usual system in the intensive potato sections is for the renter to furnish everything and receive two-thirds of the crop. Frequently the landlord is also the dealer who sells the renter the seed and fertilizer and handles the crop after it is grown.

The Eastern Shore has other interesting features besides its agriculture. It was one of the earliest settled parts of the country, dating back to 1614. Many tablets along the highways tell items of historic interest. The level fields, splendid stretch of pine woods and the type of architecture have a genuine southern charm. The climate is mild in winter and seldom hot in summer on account of the proximity of the bay and ocean. Many of the best farms are located out on the "necks" between the tidal creeks and arms of the bay.

Most of the farms seemed prosperous with buildings in good repair, many of them apparently modern. Inquiries as to the value of land elicited but little information, as few farms seem to change hands. The usual estimate was around \$100 per acre or higher. Timbered land is quite as highly valued as cleared land. One sees few if any "Farm For Sale" signs. The indications seem to be that Eastern Shore agriculture is a going concern.



Soil, climate and topography along the Eastern Shore are favorable for potato production. Above are views of a typical potato field in June.

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.,
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
T. D. HARMAN, Vice-President
GEORGE M. SLOCUM, Vice-President
NEFF LAING, Manager

EDITORIAL STAFF
E. S. BAYARD, Editor-in-Chief
C. L. WHITE, Editor
MILES HORST, Field Editor

M. C. GILPIN, Editor
G. W. HARRIS, Field Editor
Editorial Offices: PITTSBURGH, HARRISBURG, PHILADELPHIA

Contributing Editors: R. P. Ketter, Alva Agee, L. W. Lighty, W. D. Zinn,
R. C. Blasingame, J. F. Shibley, F. L. Bentley, J. G. Lipman,
S. W. Fletcher, H. C. Knandel, A. A. Beeland,
R. L. Scherling-Hansen, Gilbert S. Watts,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR.
Canadian subscriptions Fifty cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each inser-
tion. Minimum space 5 lines. Special rates on application for
livestock and classified advertising. No deceptive, immoral or
swindling advertisement inserted at any price.

Member Agricultural Publishers' Association
Audit Bureau of Circulations

Volume 1-3, No. 12 Established 1877

FOR OTHER YEARS

A FRIEND who is on a long automobile trip writes: "There is good material in the dry areas for a campaign against weeds in crops. With moisture scarce the weeds got theirs first. Clean cultivation has paid big dividends this year. The evidence against weeds is surprisingly easy to see." A lesson worth remembering in the cultivation of future crops.

DEATH IN THE SILO

LAST week four persons in North Dakota met death while cleaning a silo. It was thought that decayed silage had generated poisonous gas. Care while filling silos is justified, for scarcely a fall passes without some one falling victim to carbon monoxide gas formed by the cut corn in its process of fermentation. One way to avoid it is to stay out of the silo entirely or wait until certain that the gas is blown out. Tramping silage is now pretty generally regarded as waste effort anyway.

A SOUND INVESTMENT

THE man who needs a pure-bred sire for his herd or flock this fall and is not in position to pay cash for it should consult the breeder who has such animals for sale. Some breeders have a surplus of males which they will sell at very reasonable prices. They will also extend credit to any reliable man who needs a pure-bred sire. It is better business to buy such an animal at a reasonable price and on credit than to do without it or use an inferior one. Blood is about the cheapest thing in the world considering its value, and it is cheaper than usual this fall.

MEDICAL FARMING

MORE trouble looms for the harassed farmer. At least reports from the North Carolina State College of Agriculture indicate troublesome possibilities. It seems that if copper is put in fertilizer, the fertilizer fed to plants, the plants fed to animals, and the livers of the animals fed to humans suffering with pernicious anaemia, the afflicted humans will experience beneficial results from the copper. It would be interesting to see what that would look like if reduced to the scientific language of doctors, then translated into the mysterious symbols of a first class prescription writer.

But this discovery has a more serious significance. If the principle is carried to extremes we foresee dire results. Farming is

complicated enough with spray mixtures, fertilizer formulas, balanced rations, bacteria, etc., to contend with. Growing crops and livestock to a doctor's prescription is, as the late Artemus Ward said, "2 mutch."

WHEN TO FIGURE

A CERTAIN farmer whose methods of production and marketing are described in a western agricultural paper raises four or five hundred turkeys every year. Last year's crop he sold at 35c per pound live weight or 40c dressed. If our experience applies to western turkeys he paid about two cents per pound for the privilege of dressing his turkeys. This is not to criticize his methods, for he may have reasons not stated for doing things that way. It is merely to call attention to the need of figuring on such things as live and dressed weights and prices.

WORDS ON THE AIR

AMONG the gifts of radio to humanity is a by-product, of more interest perhaps than utility. It is a measure of oratory—a gauge of volume, not a criterion of quality. The two big broadcasting systems kept track of the speeches made by legislators over the radio at Washington during the 71st Congress. They found that some 200 lawmakers released a half million words to the microphone during that session. In view of the proverbial loquacity of Congress this seems like a modest amount, and in view of the public's conflicting opinions on most questions it was not enough to enlighten everybody on everything. However, it should be sufficient to clear our law-makers of reticence when it comes to telling voters what they will or would like to do. And it was no doubt a great relief to get rid of even a half million words when millions more were crowding for utterance.

THE FEEDING OF WHEAT

IT'S all right for Secretary Hyde and Chairman Legge to advocate the feeding of wheat whenever it is cheaper than other grains, but the quantity fed is not going to be affected very much by what anybody may say. Those who feed livestock know a dollar argument when they see it and will feed wheat in such ways and quantities as will save or make them money. Most of the current feed-wheat advice should be accompanied by some information. Whole wheat should not be fed to most animals. The best results are obtained by feeding it coarse-ground and as a part of a ration containing other grains or feeds. We believe that if large amount of wheat will be fed; also that feeders are not going to shovel it out whole and wholesale to anything except poultry.

WHY THEY FAIL

A COMMERCIAL journal states that during the five-year period ending with 1929 business failures among farmers numbered 32,555 and among other classes 217,137, or about one in seven business enterprises. We don't know much about statistics in general or these in particular, but for some years we have inquired into the cause of failure on hearing of the bankruptcy of any farmer or stockman in this region. And we find that comparatively few of these failures are the result of the bankrupt's farm operations. A few years ago some farmers who indulged in too big a potato acreage were severely jolted and some of them failed. The same is true of some extensive feeders who paid high prices for livestock and had to sell on a bad market. It is true also of some who paid boom prices for land. But most of the failures in this region have been due to investments in some other business than farming, to speculation

of some kind and to endorsement of notes or others. Our observations show that many farmers who have stuck to their own business and have been diligent in it have gone into bankruptcy. Recently we have served two cases in which farms were lost one because of endorsements and the other because of outside speculation; also one in which the farmer was attempting with capital borrowed a line of production in which he had no previous experience. Our observations have not been extensive or complete and our conclusions may be subject to correction. Those who know the farmers of the region are invited to comment on them. All to follow the suggestion of an old reader to give some of the reasons for success in agriculture.

AN EXAMPLE

THE sale of a "surplus" abroad at a price and the remainder of a crop home at a high price is the fundamental of two alleged farm relief proposals which have been much in the public eye for several years. Both are based on the assumption that the "surplus" would be accepted in foreign countries. That this is too much "assumed" is shown by the action of Canada, which recently increased tariffs on fresh fruits and vegetables from this country by 50 to 100 per cent on the ground that the products were selling in Canadian markets at less than ruling price in the country of origin. Other countries not only may object to the dumping of foreign commodities on their markets but they have or can find ways to make objection felt. This fact removes a main pillar from the McNary-Haugen and the DeBent schemes, both flimsy structures at best.

PEASANTRY AGAIN

CARL WILLIAMS, the cottonaid member of the Federal Farm Board, is a cent addition to the ranks of those who worry about peasantry for the American farmer. In a recent address he said: "If Agricultural Marketing Act by any possibility fails one of two things will happen: either some really radical legislation will be passed or no legislation. If no legislation is passed and nothing is done to stem the tide against agriculture one of two things will happen—either American farmers will be reduced to the level of the European peasant or they will finally arise in wrath and blood and shed in the resultant class conflict." Mr. Williams' chief is busy telling farmers that they can't prosper by legislation and that these two members of the Board should together and bring their hopes and statements into some sort of harmony.

TOURISM

A WAY to enhance farm income by attracting travelers is proposed by the agricultural extension service in West Virginia which offers to supervise farm accommodations for tourists and give the owners approved places a distinctive sign which shows what may be expected by visitors. Homes thus far approved local products of quality are also available. There is no doubt that the tourist business is recognized by governments as of national importance and that one country has a Minister of Tourism. In America a cabinet post. Americans spent \$900,000 traveling abroad last year, and one knows how much at home, but the spent in this country might well be increased by giving tourism official attention as West Virginia is doing.

New Jersey Farm Comment

By G. W. HARRIS

THAT 4,139 fewer farms in New Jersey are being operated than ten years ago is shown by the preliminary figures. The decline in number of farms from 1920 to 24,563 is due to the growth of cities in New Jersey and to the increasing of much unprofitable farm land. Increasing competition from other sections of the country during the past ten years has brought about the necessity for more efficient and profitable farm production.

In spite of the 17.3 per cent decrease in farms in 1929 the New Jersey Department of Agriculture shows that agriculture in the state has made progress.

The production of such crops as grains and hay, which mean comparatively small money returns for the farmers, has decreased. On the other hand, there has been a noticeable increase in the production of more highly profitable crops. The acreage devoted to vegetables in New Jersey increased from 94,996 in 1919 to 136,345 acres in 1929.

Similarly, the production of apples, peaches and pears, also highly important crops to New Jersey farmers, increased in the same period from 229 bushels to 4,818,000 bushels. That there is no decrease in the value of the annual production of crops, exclusive of dairy products, is indicated by the fact that it was \$60,341,440 as compared to \$53,358,510 in 1929.

The 1929 state's egg production has increased annually. In addition, from 1920 to 1929, milk production in New Jersey increased from 64,000,000 gallons to 76,000,000 gallons.

It is assumed that New Jersey agriculture is on the decline just because the state is becoming more and more urban and the number of farms is on the decrease, is from a true picture of the situation. New Jersey farmers because of their proximity to large cities and high values are learning to produce more and more economically.

Short courses in agriculture at Rutgers University open on November 1. Since they were established in 1906 these twelve winter courses have been very popular. Over 2,000 students have been enrolled.

They are designed to give practical training in agriculture, to assist in making a more profitable enterprise, and to give these students a deeper appreciation of rural life. That the college has been successful in its efforts to a large degree is shown by the fact that over sixty per cent of the graduates are now engaged in actual farming.

Many farm boys and girls find it financially impossible to spend the time and money necessary for years training in an agricultural college. Those who wish to return to the farm question the necessity of a four-year course. It is these individuals who each winter are listed among the course graduates.

A specialized course in dairy farming is offered to those who wish to engage in the management of a dairy, either at home or as superintendent of a farm for some one else. The work is conducted on a practical basis and includes a large amount of time in the barns in the feeding and management of milk cows and calves.

There is no doubt that the culture of dairy products, especially ice cream, appeals to many persons employed in milk and cream factories and farm dairies. During recent years the poultry short course has attracted many students. Many established farmers take this course of training in order to acquaint themselves with the most modern poultry practices.

Those who are interested in fruit growing and vegetable gardening are also offered training in these fields.

Few years ago small bags and paper cartons containing 15 or 25 pounds of potatoes were sold to the city housewives as a new market

container for potatoes. Potatoes in small packages were intended to reach the customer in the original container without the necessity of reweighing or repacking by the retail store.

The use of this type of package has increased, according to a recent survey by the U. S. Department of Agriculture. The survey included 17 cities and compared sales last year with those of the previous season. Boston, Los Angeles and New York made the most use of the small packages.

WITH the New Jersey egg laying contests nearing the close, with only three weeks of competition remaining, the contest flocks at the end of the 48th week had laid an average of 200 eggs in the Vineland contest, 199-egg average in the Passaic contest and 191 average in the Hunterdon contest.



A few of the different types of chicken and turkey shelter observed by New Jersey poultrymen on their recent tour through Pennsylvania and New Jersey are shown above. Upper left, laying house seen on Guy Lender's farm in York county, Pa. Upper right, roosting porch on the farm of P. E. Rentzels, York county, Pa. Lower left, colony house with ventilators in rear, Zeck Brothers, York county, Pa. Lower right, colony house with asbestos-cement sheet siding, Chas. Cave, Hunterdon county, N. J. Center, turkeys in confinement on D. R. Abel & Sons' farm in York county, Pa.

At the present time the Passaic county birds are laying at better than a 54 per cent rate, whereas the Vineland contest fowls are laying about 36 per cent. On this basis, the Passaic contest flock has a good chance to excel the score of the Vineland birds. This flock already is about ten eggs a bird ahead of the Hunterdon entries.

In the Passaic contest the White Leghorns from the Quality Farm at Montville with a score of 2,443 eggs continue to lead their class and rank second among all contestants. A Massachusetts Rhode Island Red flock from the Scott Poultry Farm leads the contest with 2,483 eggs. Fourth and fifth places among all contestants are held by Fox and Son Poultry Farm. The records are 2,397 and 2,390 eggs.

AFTER allowing entries from other states to monopolize the first ten positions in the Vineland Egg-Laying Contest for many weeks, New Jersey flocks are now beginning to improve their positions.

One flock that has improved its standing is the White Leghorn entry of Edward M. Packer, Vineland. His birds, with 2,335 eggs to their credit, rank seventh among all contestants. Another Leghorn entry from Hoch's Pedigree Breeding Farm, Williamstown, has advanced to eighth place, while tenth rank is held by the Leghorn pen owned by Alex Baird of Port Republic.

At Hunterdon there seems to be no doubt but what Fox and Son will continue to lead the contest. Their Leghorns have laid 2,321 eggs and hold a 76-egg advantage over the second high pen. Both second and third place are held by White Leghorns entered by Joseph Joachim. Their scores are 2,245 and 2,235 eggs. Two more Leghorn flocks,

owned by George A. Pearce of Whitehouse, and Jerseyland Farm at Point Pleasant, rank fourth and fifth with scores of 2,209 and 2,180 eggs respectively.

THE New Jersey Experiment Station serves many of the state tax payers besides the farmers. Through their desire to assist the entire state the Experiment Station has grown rapidly in the research field. Indirectly this has benefited agriculture, it has provided more funds for research and equipment and a better staff of workers than would be possible if all work were confined to the farm field.

For seven years the station has been trying to solve the problem as to the most suitable grasses for golf courses, parks, small lawns and athletic fields. Golfers realize the seriousness of this problem of turf management and are sending representatives from all parts of the state to New Brunswick on September 29 to view and study the turf plots and the results of the research work at the station.

The program in turf management was begun at the Experiment Station in 1923 with studies on the suitability of various grasses for lawns and parks under New Jersey conditions. Its greater expansion under the direction of Dr. Sprague has been made possible through financial support received from the U. S. Golf Association and an appropriation from the New Jersey legislature. The experiments have yielded solutions to such problems as the best kind of grasses for different soil types, grasses suitable for shaded areas, desirable seasons for planting, the proper use of lime, the kind and amount of fertilizer to apply, and satisfactory mowing practices. Also much information on weed control and methods of dealing with turf pests has been learned.

SIX Maryland club boys are in line to make the state judging team which will compete against teams from other states at the National Dairy Show, to be held in St. Louis. Out of the six boys who placed high in dairy cattle judging at the Timonium Fair three will be selected to carry the colors of Maryland 4-H Clubs at the National Show, and one will serve as alternate. These contestants are William Chiscoat, Baltimore county; Charles Clark and David Joesting, Harford county; Charles Ift, Frederick county; James Johnson, Baltimore county, and George Holter, Frederick county.

Winners in the team contests in judging dairy cattle at Timonium are Baltimore county, first; Harford county, second; Frederick county, third; Kent county, fourth; and Howard county, fifth.

A contest to select the best demonstration team in the state resulted in the award of first place to the team from Baltimore county. This team, composed of Gerald Ensor and Ward McCraw will compete at the National Show.

SOME of the finest production birds in the country were exhibited at the poultry show held in connection with the Atlantic County Fair recently. The Leghorn class was by far the largest with 428 entries and was outstanding in the quality and type of birds shown.

The Dorothy Poultry Association won one leg of the silver trophy offered to the association in Atlantic county winning the highest number of points in the show. Last year the Hammonton Poultry Raisers' Association won a leg on the cup, and in 1928 a leg was won by the Egg Harbor Poultry Association. This trophy must be won three times before it becomes the permanent property of that organization.

Frank Makarius exhibited the best male in the show, a Single Comb White Leghorn. The best production Leghorn pen and the best pedigree Leghorn male were exhibited by Stern Brothers of Vineland.

Mrs. Emma Lehto showed the best pullet, a White Leghorn, while the best production hen, a R. I. Red, in the show was owned by High Moor Farm. The best dozen eggs were entered by Joseph Hoch.

A Few Observations in South America

By E. S. BAYARD

I THOUGHT we would have as much hot weather south of the equator as we had north of it, but I had not understood the influence of the Humboldt current, that Antarctic Ocean stream which reaches the equator, then loses itself in the vast expanse of the Pacific. The extreme temperatures of this current are 58 and 64 degrees, from which the reader may know that the weather is comfortably cool as soon as we are in it. The sun is hot as it is everywhere in the tropics but the air is cool enough to be comfortable, particularly on a ship which is in motion. We used the electric fans no more after getting into this current.

I said above that the tropical sun is hot and so it is. Several bald-headed scientists in our party got pink craniums by standing out in the sun only a few minutes—long enough to have a picture taken. At Panama I saw a golfer playing in the heat of the sun while his caddy was following around under the shade of a parasol. I couldn't tell whether the caddy was colored or plain, but most of the population down there appears to be colored. I asked one man the population of Panama City. He said it was 50,000. I declared I had seen more than that many darkies and hadn't been there over two hours. He replied that he wasn't including them in his estimate.

Hungry for Sight of a Tree

After the jungles of Ecuador pass from sight we see no more trees for about two thousand miles, though we are within plain sight of the coast nearly all the time. For the Andes Mountains shut out the rain and there grows no blade of grass, no shrub, no tree along all that shore. Here and there, where water has been brought down from afar, there are trees and crops of all kinds, but such areas are so small in proportion to the barren lands that they might be compared with a postage stamp on a good sized county in our country. I got hungry to see trees, any kind of trees, and greeted them as old friends when they appeared.

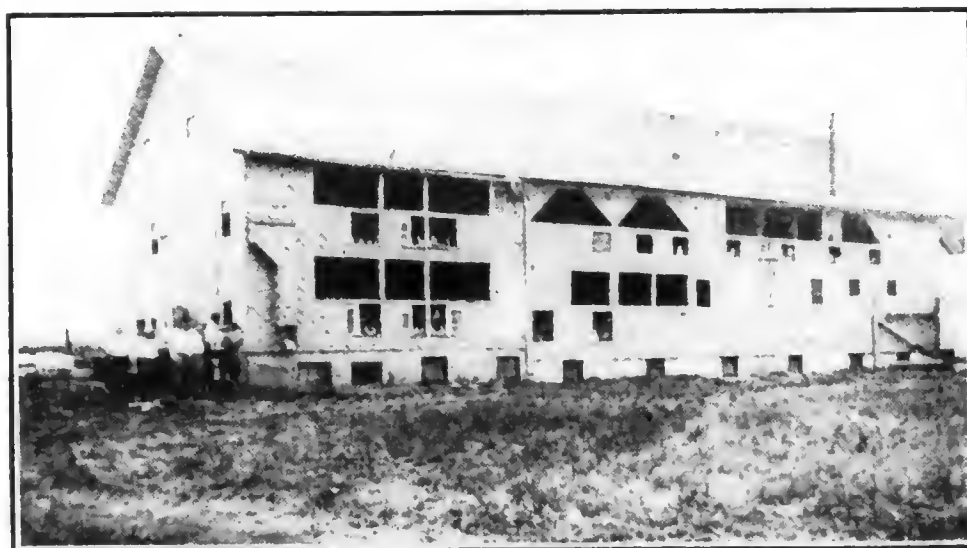
The mountains are beautiful, with their tops in the clouds and their soft shades of grey and brown and even pink and purple in the changing light. I suppose men become attached to these beauties and miss them when away and want to see them again just as we with our green hills and crystal streams. One man pointed out to me some conspicuous advantages of their climate. He said, "We can make an engagement and keep it, without any fear that rain or snow or any kind of weather will intervene. We can schedule a game of golf or baseball or tennis and know that it is going to be played. We can arrange our affairs so that we can go and come when it is most convenient to us and not even think of the weather predictions, for we know what it is going to be." I didn't say anything to him about golf on a grassless, shrubless, treeless course, or about the deadly sameness of a rainless climate. I resisted that temptation and am glad of it, for he is a fine man and there are many like him down there. No country has a monopoly of kind hearts as I have found in my little journeys here and there in this world.

A Comfortable Vacation

To those who want a long rest I commend this trip to South America. The ships are well equipped, the table is excellent, and everything possible is done for the passenger's comfort. There is no crowding. No need to rent a stateroom chair, for there are a dozen anywhere. The lounges are never full, and there is no rule against moving things about for comfort or convenience. The usual shipboard games are played, and horse races are held once a week. The steward usually selects two good-looking girls to cast the dice according to which the toy horses progress over their chalkline course, with a dignified gentleman to act as judge. They sit at a table at the finish line and the judge announces the results of each throw. I presided as judge on two occasions, with an American teacher and a Chilean teacher as my assistants at one session and two Chilean teachers at the other. Betting is lively at 25c per ticket, and a part of the money bet on the final event goes to the Seaman's Aid Fund. Everybody is happy, even the losers, for has not the horse race

added a bit of spice to the daily menu? The dice are changed at the conclusion of each race. The girls also change their work, she who threw for the horse in one race throwing for the distance in the next, and vice versa. The pranks of the dice, even with all these efforts to equalize things, are rather peculiar. There are only six horses of course, to correspond with the numbers on the dice. We would suppose one number as likely to appear as another, and probably it will as a long-time average. But in four days of racing No. 3 never won, while in one day's racing No. 4 won twice. The horses advance from one to six spaces toward the "wire" and as they near the finish there is much enthusiasm, with a big cheer when the lucky number appears and puts that horse across.

The words "ship shape" will have a new meaning to any one who gets up early enough to see the vessel's toilet made. A pile of sand, mixed with soap powder, is dumped on the deck. It is scattered about, water is poured on, and the sand-soap mixture is caught up in great long-handled scrubbing brushes with which men thoroughly scour the deck. Then more water, more scrubbing, and finally a great hose sprays a stream all over the deck, washing off all the soap and sand and leaving the boards as clean as new. Then men with rubber-edged mops wipe it down and it soon dries. All the rails and walls are wiped with dry cloths, the windows cleaned, the brass-work polished, the linoleum in the lounges or passages scrubbed, the chairs and benches wiped off, everything made "ship-shape" before the passengers are out of their beds and on the deck. A perfectly clean ship greets them every day—and the same care is bestowed on the interior as on the decks and public rooms.



This two-story laying house on the farm of Paul Guldin was made from a remodeled barn. Roof and side walls are made of asbestos shingles. Note litter chute at left end of building.



A two-story laying house on Taylor Brothers' poultry farm. Two litter chutes may be seen on the front of the building.

All this work is done by the crew and by hand, but the heavy work of a modern ship is done by mechanical power. The anchor is let down or hoisted aboard by an engine. The cargo is taken on or put off by power which swings it in or out and up or down on long ropes carried by a mast or spar used as a crane. Some strange things come aboard in the big net which hangs to the rope of this crane or derrick—round rawhide packages of silver, bars or ingots of copper, bags of nitrate, lumber, automobiles in great boxes, cotton, hides, beds and bedding and all kinds of household goods and baggage. Our ship took on one big box containing a coffin—the body of a mining engineer from Missouri. He and his driver were

found dead with their wrecked automobile at the bottom of a precipice and nobody knows how they got there. A young lady died on the ship and her metal coffin was sent aboard to take her back to her home. There are the officers after the fellow who did it. If they catch him, it seems that he is likely to tell about all the rest, and then what's the use of being smart and shrewd and all that, the same as you are? One weak stick breaks the whole bundle of you—and I'm afraid I should never be anything but a weak stick. So, Mr. Doody, I guess it's going to be smuggling instead of pearl-fishing. I'll back out. I'll hunt up some of the agents family and get a job."

"I thought you had red blood in you!" grumbled Doody. "I've been proud of you. I've been willing to hang on you, son. You're not a quitter. I hope you should back out now, after I've taken you along and feel you and given you a chance to make good money. I should say you were about as ungrateful a critter as ever abused good nature."

Shain was in the mood to have such a taunt stir up his resentment.

Poultry Flats

By R. L. SCHARRING-HAUSEN

JUST as city dwellers are taking more and more to apartment houses for various reasons, the observer will find an increasing number of multi-story laying houses on poultry farms—poultry flats, they might be called. Some of these buildings have been erected primarily for keeping poultry; at other times they are barns which have been remodeled for the purpose. We have seen such buildings in New England, New Jersey, Delaware, Maryland and Pennsylvania. Some of them were new, some remodeled barns, some were small, some housed several thousand birds; but in every case the owners were well pleased and several had erected more than one.

It used to be thought that layers had to be range; but modern poultry practice tends to house birds throughout the year, and once we accept the idea that with proper care birds will lay just as well in total confinement as they will if allowed to range, and perhaps better, all the advantages of multi-story buildings become apparent.

I might add that "proper care" is very largely a matter of vitamins, something about which we have gained understanding only in the past few years.

One of the advantages of the barn-type houses is economy of construction. Here we have three or four times the floor area under one roof that is possible with the common long-type laying house, and this can be of slate or asbestos shingles which will last a lifetime in contrast to the constant care and renewal necessary to maintain an inferior covering. It is true that a new building will require somewhat heavier foundation than will a one-story affair, but when a barn is taken over the foundation is already there, and at any rate saving in roofing cost will far outweigh the cost of heavier timbers.

Labor Savers

One of the greatest advantages in the saving of labor. A building of the barn type, properly arranged, allows a man to take care of a great many birds. The space under the peak is generally utilized for grain and mash storage, and once the mash is raised to the storage space by elevator or hoist, it is fed through chutes to the floors below, so that mash is distributed to the hoppers without further effort and grain can be fed by merely opening a door. There is no lugging sacks around, no carrying feed pails the length of a house from the feed room.

When it comes time to clean, the manure and feed fall through other chutes to a spreader or wagon on the ground floor. Water is piped to each layer pen, and a drainage system also is provided, so that there is no carrying water, and if an automatic system is installed practically no attention is needed to assure plenty of water for the birds.

Another advantage is in the comfort of the birds. During the extremely hot weather of early August I was in a number of these barn-type houses in Pennsylvania, and in every case they were cooler than the long-type houses. Most of the buildings were provided with windows on the sides, and some on four, so that there was a circulation of air, and the elevation insured cooling any breeze which might be stirring. Proper insulation of walls and ceiling also made a building in winter. Ventilation during the winter months is provided by flues extending from the roof floors through the roof. (Cont'd on page 9)

September 20, 1930

"MR. DOODY, I guess I ain't going to be much of a man for your line of work," said Shain. "I didn't know anything about this smuggling business when we started out, you'll remember. Then you said there wasn't any trouble about it, and it wasn't like a lot of other things that are against the law. But it looks to me just as though it was. There was a man shot to death there. There are the officers after the fellow who did it. If they catch him, it seems that he is likely to tell about all the rest, and then what's the use of being smart and shrewd and all that, the same as you are? One weak stick breaks the whole bundle of you—and I'm afraid I should never be anything but a weak stick. So, Mr. Doody, I guess it's going to be smuggling instead of pearl-fishing. I'll back out. I'll hunt up some of the agents family and get a job."

"I thought you had red blood in you!" grumbled Doody. "I've been proud of you. I've been willing to hang on you, son. You're not a quitter. I hope you should back out now, after I've taken you along and feel you and given you a chance to make good money. I should say you were about as ungrateful a critter as ever abused good nature."

Shain was in the mood to have such a taunt stir up his resentment.

"Look here Mr. Doody!" he cried. "I've been my own with the paddle, I've toted at the carries, I've done just as good a chore for you as I know how. I've earned my passage. And now if I want to quit, I've a right to."

"Praps you'd like to get right out now and make you do it!" sneered the old man. "I've got a mind to make you do it!"

"Give me time to take off my shoes, and I'm willing to swim for it!" Shain retorted, now thoroughly angry.

But after a minute Doody set his paddle into the water and called to the youth to mind his end. The canoe went on down-river.

Whether Doody's ire cooled, or whether craft inspired him to alter his tone, the young man did not know; but after a half-hour of silence Doody laid his paddle across the thwart, and said, with a very conciliatory manner:

"There's no need of us havin' trouble, son. I can show it to you. You've got fussed up and frightened tonight. It was a fool thing that Salter did, and has made trouble for all of us for the time. No, don't blame you one mite. And I'm goin' to say you here and now that I've got no hankerin' to keep in the business myself, the way things are. It wouldn't be safe to go back up-river, let's you and me stick together. We'll find something else to do. I won't run you into trouble, we'll make a dollar yet. I need you to help me out. So we'll call it settled. You'll stay with me, eh?" Doody's voice had appeal in it.

But the young man was still wary—still resentful.

"I've been thinkin' it over," said he, "and I guess if you'll let me go my way I will. My work is what counts in the long run. I'll find a job somewhere about here."

"And you won't stay with me?" There was a note in Doody's tone.

"No, I don't think I will."

"Well, you can't leave very well now in the middle of the night, and in the middle of the river. You'll keep going awhile yet I guess."

From that moment on Shain, paddling more vigorously and joyously, was a prisoner without realizing the fact.

He judged it was near midnight when Doody, in a curt word of command, put the nose of the canoe towards shore. They landed on the Canadian shore, where the bank was high and where a house was anchored to receive canoes. Pulling themselves up a steep path by means of hand-rail, they walked into one of a huddle of small houses, only leading the way. The house was dark and the door was unlocked.

With an air of being perfectly at home, the in-carried feed pails the length of a house from the feed room.

When it comes time to clean, the manure and feed fall through other chutes to a spreader or wagon on the ground floor. Water is piped to each layer pen, and a drainage system also is provided, so that there is no carrying water, and if an automatic system is installed practically no attention is needed to assure plenty of water for the birds.

Another advantage is in the comfort of the birds. During the extremely hot weather of early August I was in a number of these barn-type houses in Pennsylvania, and in every case they were cooler than the long-type houses. Most of the buildings were provided with windows on the sides, and some on four, so that there was a circulation of air, and the elevation insured cooling any breeze which might be stirring. Proper insulation of walls and ceiling also made a building in winter. Ventilation during the winter months is provided by flues extending from the roof floors through the roof. (Cont'd on page 9)

PENNSYLVANIA FARMER

The Skokums of the Allegash

By Holman F. Day

Copyright, 1907, by Perry Mason Company, Boston, Mass.

SYNOPSIS

The Mayor of Toban Jaws is the title, given in fun by the rough drivers who direct the stream of logs down the river, to the "trunk" of the gang who is left alone all season to watch a ledge and prevent logs piling up there and causing a jam. This job falls to young Shain Searway on his first trip with the river men. At first very homesome he learns to like the river and enjoys occasional visitors who use it as a thoroughfare. One of these is Lud Doody, a man who shows a rod to find treasure with and induces Shain to accompany him in search of a fortune. Leaving Doody's former partner, much against his will, to guard the Jawa and prevent a log jam young Searway prepares for his great adventure. After some traveling by canoe they stop at a settlement where they are met by several suspicious-looking characters who seem to know Doody. A man, apparently one of their gang, rushes into camp crying that he has shot some one. Doody hurries Shain away, and as they paddle down the river they hide from other canoes, which Shain learns carry customs officers on the trail of the man who did the shooting. On arriving at Ubal Cyr's hotel they learn that John Flanders, the wounded man, is in the hotel. Flanders attempts to detain Doody, but is unable to do so on account of his wound.

journeyed in anxious flight with him the night before.

"Son," he said, "you and me can't afford to have any misunderstanding. Of course, when two people get more or less flustered up, as we did last night, we say things that we don't mean. Things look different in the morning, usually."

He bared his head, and the warm breeze ruffled his gray hair. The river surface sparkled under the sun, and the broad valley seemed full of peace and comfort.

Shain felt all this kindly influence, and was almost disposed to regret his stubbornness of the night before.

"I'm goin' away for the forenoon on a little business for the 'both of us,'" the old man went on, cheerfully. "I'm in hopes to make a bargain for something I've had in mind for some time. It's a business for the two of us, and it isn't smugglin'. I don't blame you for bein' afraid of that lay I put up to you. I'm afraid of it now myself. I'm beginnin' to see that it's a good thing that you and me fell together as we did. I see things now in a different way, and I'm gettin' too old to be in anything that ain't square and honest." Under the frank sun and in the free air the protestations of Doody seemed to borrow sincerity from nature.

Shain grasped his hand with the enthusiasm of a comrade, and then awaited his return with deep content.

He sat on the dirt banking in the warm sun and chatted with Vital, who sang the praises of "M'sien" Doody in no uncertain measure.

Moreover, Vital was inclined to go into the ethics of customs duties, and from the point of view of a Canadian and a freetrader, bewildered Shain with his arguments. By the time he had arrived at the somewhat anarchistic doctrine that the government was a thief, and that it was not wrong to steal back from a thief, Doody returned, and displayed before the astonished eyes of Shain the nucleus of their proposed new fortunes.

It was a large van on four wheels, drawn by two sturdy little horses. There was a high seat shaded by a rusty enamel top. Double doors at the rear of the van were padlocked, and further secured by a bar of iron. Across these doors, in rather dingy lettering, appeared the words:

"Tinware and Yankee Notions."

Doody, after he pulled up the horses, leaned his elbows on his knees and beamed on his young friend.

"I ain't any kind of a man to sit still in one place," he explained. "I've got to have a job that keeps me on the go. Bein' as how deputy marshals is usin' all the water on the Allegash for travellin' just at the present time," he winked at Vital,—"I'll take up the peddin' business. Jim Annis, bein' laid by with the liver trouble, had an

outfit to sell at a bargain, as I've known for some time. So here we are, son. What say?"

"But do you need a helper?" asked Shain. "How do you think an old fool like me would get along with the women-folks, with ciperin', with dickerin', and all that? I'd smooch up all my stock with my dirty hands, make mistakes in change, and get everybody mad with me at the send-off. This ain't charity, son; this is business! I need you."

THUS it suddenly, but quite naturally, came about that Shain found himself perched on the seat of a peddler's cart that rumbled down the valley of the St. John, past the maple groves, and the little houses that crowded along the shore.

"Look at them horses," said Doody, pointing his whip butt at the shaggy little pair. "The stock that they came from was brought over the ocean from France into Acadia, and when some of them poor critters of settlers got away from the English and came up this river, they brought some of those horses on their rafts. And they brought cows, too—some of the real Jersey stock. You'll see the pure strain feedin' in the pastures along this road."

The old man called attention to the farms which, where the houses crowded more closely, were more like broad lanes than farms. These bands of land, enclosed between rail fences, stretched up over the hills to the belt of wooded upland.

"They were big farms in the old days," said Doody, "but they have big families this way, you know, and when the old men die, they divide their farms lengthwise among the children, so that each can have a house on the road and his own bit of woodland. I don't know where they'll get 'em reduced to after a time. But they have to hoe standin' edgewise, as it is."

The men whom they met lifted their hats to them. The men who were at work in the fields near the road or in their dooryards straightened and performed similar courtesy.

"That's something else that was imported from the old country," explained the old man. "They're good folks, the Canucks up this way are, son, and you needn't be ashamed that your people are hitched up with 'em. We'll be huntin' up some of your relatives before long."

Interested as he was in his surroundings and in the information that Doody had at his tongue's end, Shain failed to notice that his employer did not appear to be very anxious for trade.

He stopped at a few of the larger houses and went in alone, leaving the young man to care for the horses.

He made a number of purchases, apparently, for the stout burlap sack that the old man took from the van through the rear doors, and tugged into the houses where he stopped, seemed very much heavier each time that he came back. The contents clanked with a strange metallic sound when he tossed the sack back into the van.

But Doody proffered no explanation as to his purchases, and Shain asked no questions about them.

The traffic seemed legitimate, and the young fellow's delight in the journey, in the sunshine, in the novel scenes, was altogether too acute to allow him to be suspicious.

But he did inquire at last why it was that they sold no goods from the cart.

"I haven't stocked up yet," said Doody. "Old Annis didn't have anything left worth speakin' of, but I'm buyin' some old junk right along. When we get to Edmundston we'll put in our line."

For two days they proceeded on their way leisurely down the river, stopping for "baiting," and at night at farmhouses.

The sacks continually grew heavier, and Doody's apparent satisfaction increased with his purchases. But he kept the rear doors securely padlocked, and the key stuffed deep into his trousers pocket.

On the third day they swung from the river road and went north along a highway less populous. In the afternoon a broad lake fronted them, and they plodded round it through heavy woods.

The farmhouses and the cleared land were now all left behind them. Occasionally there was a log hut in the woods, with tenants of the squatter type, whose only attempts at agriculture were straggly gardens scratched in around blackened stumps. And at last there were not even cabins.

Doody had brought along cooked food, bought at their last stopping-place, and the top of the van was piled with sacks stuffed with hay and oats for the horses.

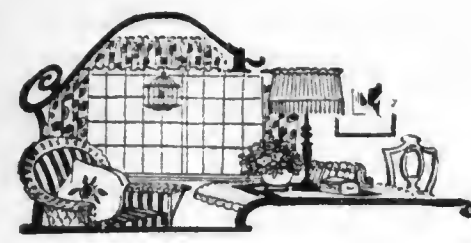
The "baited" at dusk in a little clearing beside the road. A rough wood road here led away at right angles, following the course of a brook.

Doody stewed in a tin pail a chicken that a farmer had killed for him, and after the meal the two men leaned back against a tree in deep content.

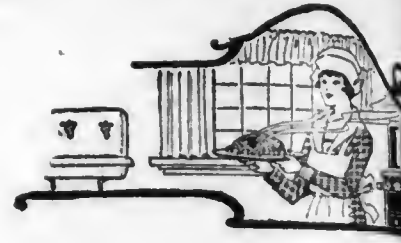
"We'll have to drive on a little farther to a house I know," said the old man, stuffing his tobacco into his pipe.

His gray eyes shifted rather nervously and his hands trembled a bit, but the young man did not notice his excitement.

(To be continued.)



The Farm Home



The Gold Star Pilgrimage

By MARGUERITE STEELE McCREARY

WHEN on June 25 the ninth contingent of Gold Star Mothers and Widows sailed from New York most of us could scarcely believe it was all true. Ever since we had received the engraved invitation from the government in April, we had lived in anticipation that was sometimes joyful, sometimes painful. And now we were on board the "Republic" really going to France to visit the graves of our soldiers, going as guests of the government, of the United States. And we were to find the government a perfect host.

Our party of 268 was to date the largest contingent that had sailed. Most of our pilgrims were from New York and Massachusetts but many other states were represented. There were four from my own state, Pennsylvania. Many of these pilgrims had never been away from their home town. One mother had never been away from her own home for thirty years. Some were given royal "send-offs" by the American Legion. Another woman reported one hundred thirty at the station to wish her "bon voyage." In several towns bands played farewell for the woman who was going to France to visit the grave of a loved one who had given his life for his country.

Presented with Bronze Medal

Then there was the mistful-eyed little North Carolinian and the white-haired mother who was constantly seeking interviews with some one—the captain, the chief officer, the chief steward or some celebrity on board. The results of these interviews were sent to her home newspaper. One mother of twenty danced the Irish jig the night of the ship concert. The oldest mother was eighty-four. Several great-grandmothers, wearing little knitted shawls over their shoulders, trudged the deck. Of course, most of the pilgrims were mothers but among them were young women whose husbands lay in France, whose homes and hopes are broken, whose future seems in the past. To me the courage of some of these hearts was supreme.

On shipboard with our old routine left at home, the days passed rapidly. There were letters to write home telling our experiences and cards must be sent to our friends. The Washington lady stamped one hundred thirty-five cards. Bouillon was served every morning and tea every afternoon and we were always ready for both. The ship library provided reading material. Fingers unused to leisure kept knitting or fancywork on hand both on deck and in the lounge. One afternoon Captain Moore, commander of the "Republic," gave a reception to the Gold Star women. In the name of the President of the United States Line, (to which our vessel belonged) he presented each pilgrim with a handsome bronze medal stamped with a ship traveling under a gold star from the Statue of Liberty to the Eiffel Tower.

The Best of Care

Two army officers were in charge of the party. Nurses looked after the physical welfare of the pilgrims (though the number of seasick were few) and a genial hostess kept every person happy. Not one detail was lacking that would contribute to our health, comfort and safety. Even in our highest hopes none of us expected so much attention and care. We could not have worked out such perfect plans for ourselves.

Due to a broken propeller and two days fog, we landed in Cherbourg a day late. At the port our conductors took care of our passports so we were spared the experience of handling them. In an incredibly short time after landing we were in a special train on our way to Paris.

At Paris the party was grouped according to cemeteries visited and was then assigned to different hotels. The Suresnes Cemetery is in the city;

some were a half day's journey, still others a full day's bus travel from Paris. Belleau Wood Cemetery was the destination of one group of thirty-three.

During our travel in France each group was conducted by an army officer. The fine sympathy of our Captain fitted him for his work. Two nurses took the best care of us and an interpreter made possible communication with the French at all times. So many little courtesies and surprises awaited us. Every forenoon and afternoon we stopped for tea. We were never hurried and ample time was allowed for shopping.

Marks of War Still There

Each group spent three days visiting the cemetery which was its destination. One afternoon we traveled by bus from Paris out over the beautiful, tree-bordered highway and past fields where poppies and cornflowers waved among the golden wheat, to the historic old town of Chateau Thierry. It seemed impossible that twelve years ago some of the hardest fighting of the war was done there by the peaceful Marne River. The village was almost entirely destroyed but is now rebuilt. However, ruins are in evidence. Across the court from the casement window in my room in the little French hotel, stood a tall war-scarred building. The mirror in one of our rooms had been pierced by a bullet and the stairway was honey-combed with holes.

Belleau Wood Cemetery is only a few miles from Chateau Thierry. It is a beautiful spot and in each of our four trips there we were given leisure to linger. The graves there and in every American Cemetery in France are marked with crosses of Italian marble. The best landscape artists in the world are employed to beautify these plots owned by the United States government. Graves in British cemeteries are marked with stone slabs, in French cemeteries with white wooden crosses and in German burying grounds with black wooden crosses.

Through further generosity of the government, each party spent several days sightseeing in and about Paris. We were taken over the battlefields and then to the spot where the Armistice was signed. I had always imagined the high officers of each army met in an open field. But it was in the forest of Compiègne where General Foch received the German officers. We visited the old Cathedral at Rheims, spent a day at Napoleon's palace at Fontainebleau, a day at Versailles and took several trips through Paris. Then on July



Our Autumn and Winter Fashion Book is ready to help you with suggestions and patterns for the season. It costs but ten cents and may be ordered by writing Pattern Department, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.

17th two hundred and sixty-eight appreciative pilgrims sailed westward on the "America." Though the weather was fine and the sea calm, time was long. We had been to France and were eager to come home. But the days passed and the gray dawn of July 26th we said "Good morning" to the Statue of Liberty.

I would like to tell eligible women who are contemplating taking the trip next year or the next, they need have no fear or hesitancy about starting alone. For they will not be alone. They will find congenial companions. Both on land and sea nurses will fairly hover over them. They will return in better health than when they started. They will marvel at the perfect plans that have been worked out for them and will come home overwhelmed with appreciation for their host, the government of the United States.

Pencil and Pad

WHEN one lives six miles from town and must depend on a man who goes just when he suits him—the time often being at very short notice—there is only one way to make sure of getting needed groceries, and that is to make the list as fast as one thinks of needs.

But we have remembered other things by memorandum. We discuss some subject or question. Later a member of the family gets more information on the subject. He makes note of it and lays the note on the dining table, that being a meeting place of the family. I often find notes written by my high school boy after we had gone to bed—bits of gossip he had heard during the day and forgotten to tell us, something in the text-book he knew would interest me. The little girl usually tucks her note in the sugar bowl. She watches carefully and writes the time at which I am to call her home.

If some one needs to take medicine a slip of paper records the hours at which each kind of tablet is needed.

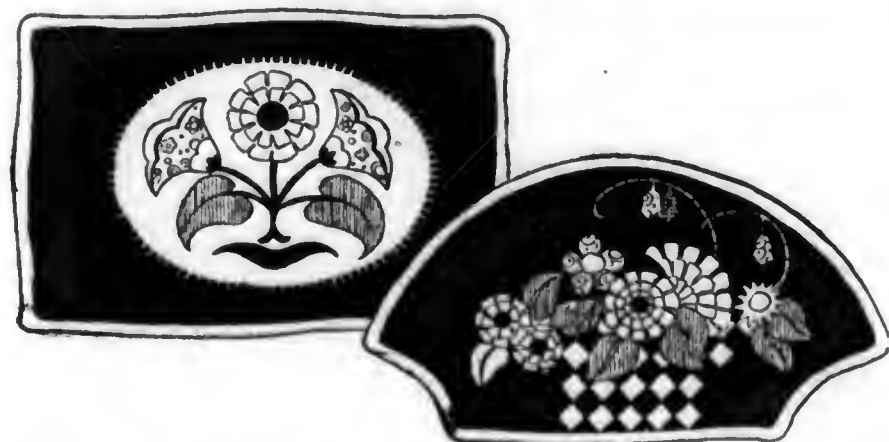
Various meetings occur once a month and are so easy to forget. When they are within a few days, mark the time on a slip of paper and pin it to the table cloth. I may not happen to look at the calendar, but I don't risk marking dates there.

Little jobs for the children will pop up in my mind when they are present or are busy at something else. Unless they can do them immediately, I must keep it in mind when I am ready have so much to think about. When the job is finished, it is crossed out.

Pleasant thoughts, little things to be thankful for, choice bits from one's reading—how a glance over a list of that kind would cheer one up on a discouraged day! Make friends with your pencil and pad. It will well repay you.

Send your order, giving pattern number, to Embroidery Department, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.

Smart Pillows of Oilcloth

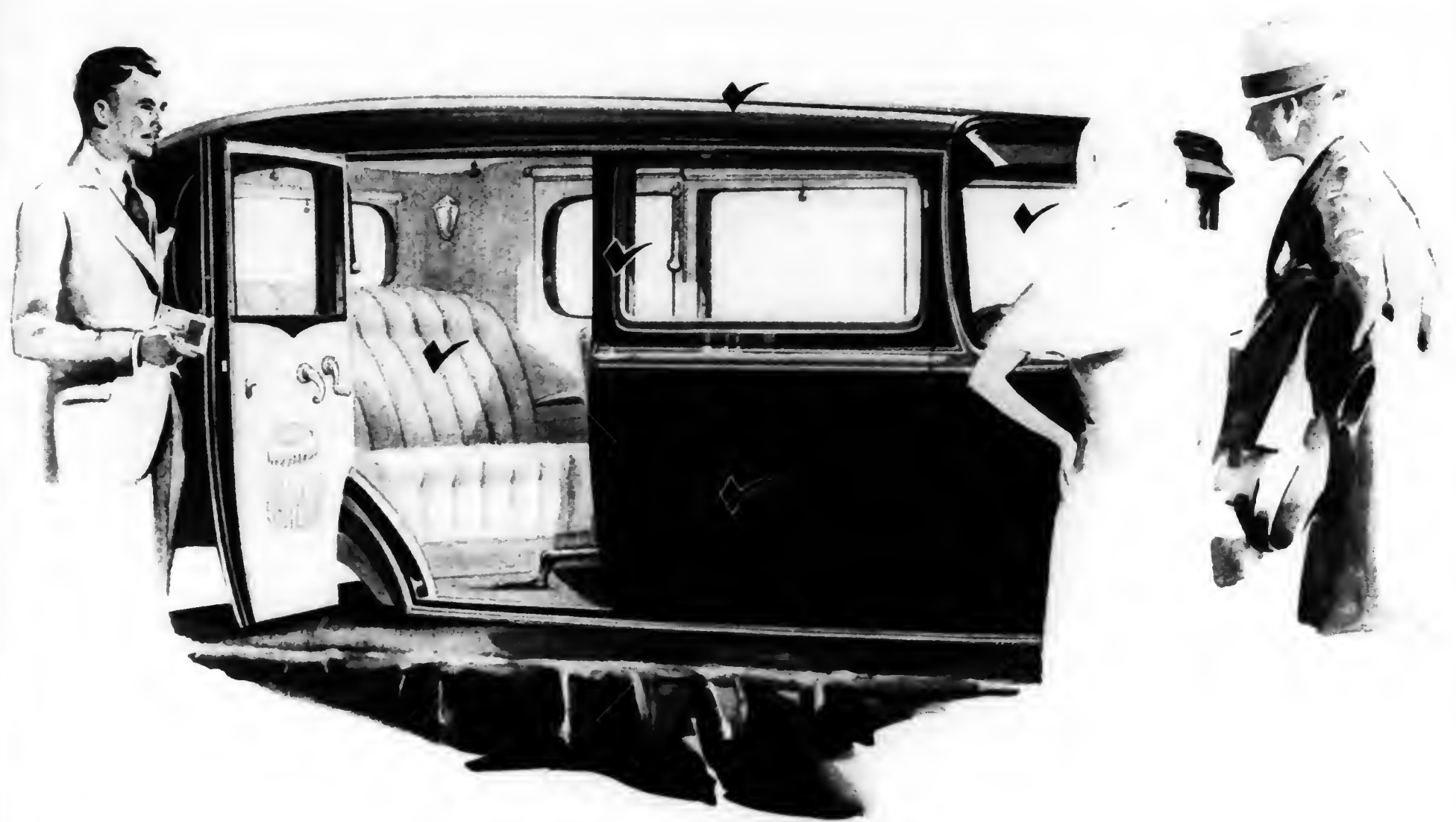


NUMBER 609 is a large pillow of unusual shape, of black oilcloth posies and leaves. The posies come from a basket of ivory, laced through black. The stems are green wool chain-stitch, and the ball centers of the flowers are of wool yarn. All materials, including orange felt binding, are included in order number 609, at 80 cents.

The oblong pillow, number 610, 70 cents, also includes front, back, felt binding, all color swatches, and instructions. This includes everything

but the stuffing for the pillows, and that is excelsior. Even paper, torn and wadded, makes suitable filling, as these colorful pillows are for sheer swank and gaiety; not even the cat could bury himself on their slippery sides! But a group of these, a center basket pillow flanked by two oblongs, makes a spot that draws both attention and admiration.

Send your order, giving pattern number, to Embroidery Department, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.



You do not need to sacrifice FISHER BODY *Extra Values* in the car you buy

Certain definite and visible extra values are built into every Fisher Body car. Note them carefully, and consider their actual worth before you decide on any car.

Then remember that you do not need to sacrifice these extra values in the car you buy.

Because the extra values of Body by Fisher are available in General Motors cars in every price field—the only cars with Body by Fisher.

Check These Extra Values in Fisher Body Cars

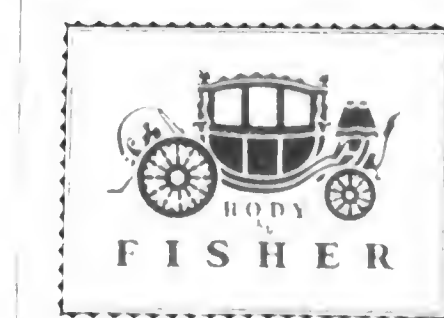
✓ Fisher Wood and Steel Construction—This type of construction joins the qualities of hardwood with those of steel. Overlaid, carefully braced wood framework are mounted strong steel. Thus the wood reinforces the steel and the steel reinforces the wood. This is the only type of body construction that provides maximum resiliency, durability and quietness.

✓ Fisher Roof Construction—This well known type of Fisher bow and flat roof construction has been improved to meet the more exacting requirements of modern motoring for increased safety, durability and quietness. Strong steel braces at the sides and corners of the roof rails further strengthen the roof structure. Steel panels over the wood roof rails afford additional strength and greater beauty.

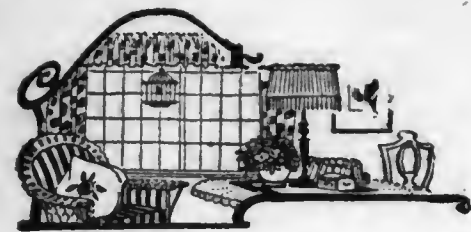
✓ Fisher Interiors—The finest and most durable fabrics obtainable are used for upholstering Fisher Bodies. Comfortable Fisher cushions with strong and resilient coil springs and the adjustable front seat provide an added degree of convenience and motoring comfort.

✓ Clear Vision and Safety—Clear and undistorted vision is afforded by the highest quality genuine plate glass used throughout Fisher Bodies. Fisher non-glare vision and ventilating windshield is a major safety factor, giving a wide range of clear vision through a single pane of plate glass and also reducing the annoying reflections of glare. The narrow pillar posts of unusual strength, also contribute to driving safety by eliminating the "blind" spot in the driver's range of vision.

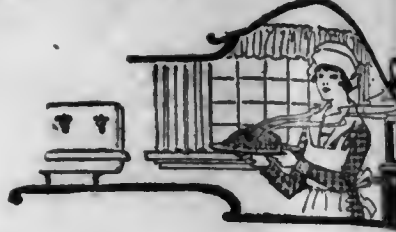
✓ Many Other Fisher Features—Such features as the Protectalok door handles; window lifts that function easily and trouble-free door locks made of the finest materials obtainable, lend additional qualities of extra value to the more attractive style, the extra durability and greater comfort, convenience and safety of every car equipped with Body by Fisher.



CADILLAC • LACIA • BUICK • PONTIAC • OLDSMOBILE • CHEVROLET
GENERAL MOTORS



The Farm Home



The Gold Star Pilgrimage

By MARGUERITE STEELE MCCREARY

WHEN on June 25 the ninth contingent of Gold Star Mothers and Widows sailed from New York most of us could scarcely believe it was all true. Ever since we had received the engraved invitation from the government in April, we had lived in anticipation that was sometimes joyful, sometimes painful. And now we were on board the "Republic" really going to France to visit the graves of our soldiers, going as guests of the government, of the United States. And we were to find the government a perfect host.

Our party of 268 was to date the largest contingent that had sailed. Most of our pilgrims were from New York and Massachusetts but many other states were represented. There were four from my own state, Pennsylvania. Many of these pilgrims had never been away from their home town. One mother had never been away from her own home for thirty years. Some were given royal "send-offs" by the American Legion. Another woman reported one hundred thirty at the station to wish her "bon voyage." In several towns bands played farewell for the woman who was going to France to visit the grave of a loved one who had given his life for his country.

Presented with Bronze Medal

Then there was the mistful-eyed little North Carolinian and the white-haired mother who was constantly seeking interviews with some one—the captain, the chief officer, the chief steward or some celebrity on board. The results of these interviews were sent to her home newspaper. One mother of twenty danced the Irish jig the night of the ship concert. The oldest mother was eighty-four. Several great-grandmothers, wearing little knitted shawls over their shoulders, trudged the deck. Of course, most of the pilgrims were mothers but among them were young women whose husbands lay in France, whose homes and hopes are broken, whose future seems in the past. To me the courage of some of these hearts was supreme.

On shipboard with our old routine left at home, the days passed rapidly. There were letters to write home telling our experiences and cards must be sent to our friends. The Washington lady stamped one hundred thirty-five cards. Bouillon was served every morning and tea every afternoon and we were always ready for both. The ship library provided reading material. Fingers unused to leisure kept knitting or fancywork on hand both on deck and in the lounge. One afternoon Captain Moore, commander of the "Republic," gave a reception to the Gold Star women. In the name of the President of the United States Line, (to which our vessel belonged) he presented each pilgrim with a handsome bronze medal stamped with a ship traveling under a gold star from the Statue of Liberty to the Eiffel Tower.

The Best of Care

Two army officers were in charge of the party. Nurses looked after the physical welfare of the pilgrims (though the number of seafick were few) and a genial hostess kept every person happy. Not one detail was lacking that would contribute to our health, comfort and safety. Even in our highest hopes none of us expected so much attention and care. We could not have worked out such perfect plans for ourselves.

Due to a broken propeller and two days fog, we landed in Cherbourg a day late. At the port our conductors took care of our passports so we were spared the experience of handling them. In an incredibly short time after landing we were in a special train on our way to Paris.

At Paris the party was grouped according to cemeteries visited and was then assigned to different hotels. The Suresnes Cemetery is in the city;

some were a half day's journey, still others a full day's bus travel from Paris. Belleau Wood Cemetery was the destination of one group of thirty-three.

During our travel in France each group was conducted by an army officer. The fine sympathy of our Captain fitted him for his work. Two nurses took the best care of us and an interpreter made possible communication with the French at all times. So many little courtesies and surprises awaited us. Every forenoon and afternoon we stopped for tea. We were never hurried and ample time was allowed for shopping.

Marks of War Still There

Each group spent three days visiting the cemetery which was its destination. One afternoon we traveled by bus from Paris out over the beautiful, tree-bordered highway and past fields where poppies and cornflowers waved among the golden wheat, to the historic old town of Chateau Thierry. It seemed impossible that twelve years ago some of the hardest fighting of the war was done there by the peaceful Marne River. The village was almost entirely destroyed but is now rebuilt. However, ruins are in evidence. Across the court from the casement window in my room in the little French hotel, stood a tall war-scarred building. The mirror in one of our rooms had been pierced by a bullet and the stairway was honey-combed with holes.

Belleau Wood Cemetery is only a few miles from Chateau Thierry. It is a beautiful spot and in each of our four trips there we were given leisure to linger. The graves there and in every American Cemetery in France are marked with crosses of Italian marble. The best landscape artists in the world are employed to beautify these plots owned by the United States government. Graves in British cemeteries are marked with stone slabs, in French cemeteries with white wooden crosses and in German burying grounds with black wooden crosses.

Through further generosity of the government, each party spent several days sightseeing in and about Paris. We were taken over the battlefields and then to the spot where the Armistice was signed. I had always imagined the high officers of each army met in an open field. But it was in the forest of Compiègne where General Foch received the German officers. We visited the old Cathedral at Rheims, spent a day at Napoleon's palace at Fontainebleau, a day at Versailles and took several trips through Paris. Then on July



Our Autumn and Winter Fashion Book is ready to help you with suggestions and patterns for the season. It costs but ten cents and may be ordered by writing Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

15th two hundred and sixty-eight appreciative pilgrims sailed westward on the "America." Though the weather was fine and the sea calm time was long. We had been to France and were eager to come home. But the days passed and the gray dawn of July 26th we said "Good morning" to the Statue of Liberty.

I would like to tell eligible women who are contemplating taking the trip next year or the next, they need have no fear or hesitancy about starting alone. For they will not be alone. They will find congenial companions. "Both on land and sea nurses will fairly hover over them. They will return in better health than when they started. They will marvel at the perfect plans that have been worked out for them and will come home overwhelmed with appreciation for their host, the government of the United States.

Pencil and Pad

WHEN one lives six miles from town and must depend on a man who goes just when he suits him—the time often being at very short notice—there is only one way to make sure of getting needed groceries, and that is to make the list as fast as one thinks of needs.

But we have remembered other things by memorandum. We discuss some subject or question. Later a member of the family gets more information on the subject. He makes note of it and lays the note on the dining table, that being a meeting place of the family. I often find notes written by my high school boy after we had gone to bed—bits of gossip he had heard during the day and forgotten to tell us, something in his text-book he knew would interest me. The little girl usually tucks her note in the sugar bowl. She watches the time at which I am to call her home.

If some one needs to take medicine a slip of paper records the hours at which each kind of tablet is needed.

Various meetings occur once a month and are so easy to forget. When they are within a few days, mark the time on a slip of paper and pin it to the table cloth. I may not happen to look at the calendar, but I don't risk marking dates there.

Little jobs for the children will pop up in my mind when they are present or are busy at something else. Unless they can do them immediately I must keep it in mind when I am ready have so much to think about. When the job is finished, it is crossed out.

Pleasant thoughts, little things to be thankful for, choice bits from one's reading—how a glance over a list of that kind would cheer one up on a discouraged day! Make friends with your pencil and pad. It will well repay you.

Florence C. Rebel.

Smart Pillows of Oilcloth

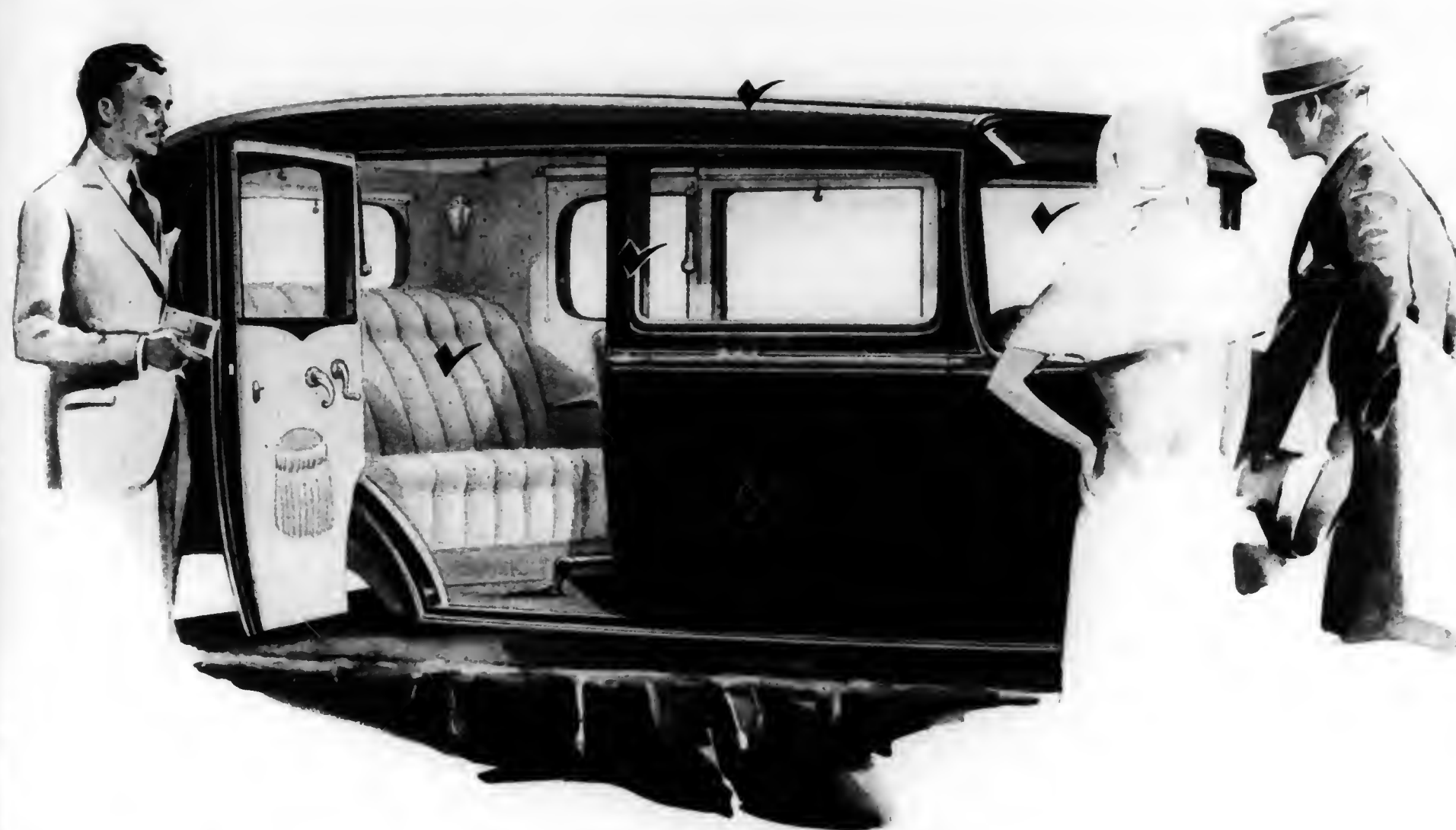


NUMBER 609 is a large pillow of unusual shape, of black oilcloth posies and leaves. The posies come from a basket of ivory, laced through black. The stems are green wool chain-stitch, and the ball centers of the flowers are of wool yarn. All materials, including orange felt binding, are included in order number 609, at 80 cents.

The oblong pillow, number 610, 70 cents, also includes front, back, felt binding, all color swatches, and instructions. This includes everything

but the stuffing for the pillows, and that is excelsior. Even paper, torn and wadded, makes suitable filling, as these colorful pillows are for sheer swank and gayety; not even the cat could bury himself on their slippery sides! But a group of these, a center basket pillow flanked by two oblongs, makes a spot that draws both attention and admiration.

Send your order, giving pattern number, to Embroidery Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.



You do not need to sacrifice FISHER BODY Extra Values in the car you buy

Certain definite and visible extra values are built into every Fisher Body car. Note them carefully, and consider their actual worth before you decide on any car.

Then remember that you do not need to sacrifice these extra values in the car you buy.

Because the extra values of Body by Fisher are available in General Motors cars in every price field—the only cars with Body by Fisher.

Check These Extra Values in Fisher Body Cars

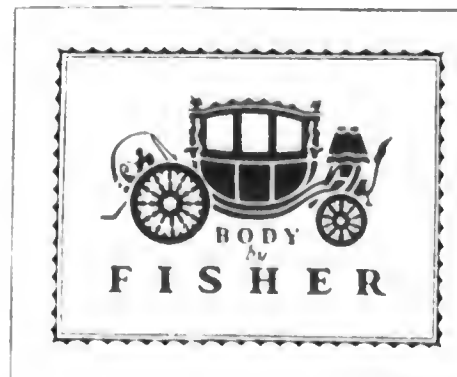
Fisher Wood and Steel Construction—This type of construction joins the qualities of hardwood with those of steel. Over identically braced wood framework are mounted strong steel panels. Thus the wood reinforces the steel and the steel reinforces the wood. This is the only type of body construction that provides maximum strength, resiliency, durability and quietness.

Fisher Roof Construction—This well known type of Fisher bow and slat roof construction has been improved to meet the more exacting requirements of modern motoring for increased safety, durability and quietness. Strong steel braces at the sides and corners of the roof rails further strengthen the roof structure. Steel panels over the wood roof rails afford additional strength and greater beauty.

Fisher Interiors—The finest and most durable fabrics obtainable are used for upholstering Fisher Bodies. Comfortable Fisher cushions with strong and resilient coil springs and the adjustable front seat provide an added degree of convenience and motoring comfort.

Clear Vision and Safety—Clear and undistorted vision is afforded by the highest quality genuine plate glass used throughout Fisher Bodies. Fisher non-glare vision and ventilating wind-shield is a major safety factor, giving a wide range of clear vision through a single pane of plate glass and also reducing the annoying reflections of glare. The narrow pillar posts of unusual strength, also contribute to driving safety by eliminating the "blind" spot in the driver's range of vision.

Many Other Fisher Features—Such features as the Protectalok door handles; window lifts that function easily and trouble-free door locks made of the finest materials obtainable, lend additional qualities of extra value to the more attractive style, the extra durability and greater comfort, convenience and safety of every car equipped with Body by Fisher.



CADILLAC • LANSALLE • BUICK • VIKING • OAKLAND
OLDSMOBILE • PONTIAC • CHEVROLET
GENERAL MOTORS

Mail Order Stores at: Chicago Kansas City St. Paul Baltimore Portland, Ore. Oakland, Calif. Fort Worth Denver



IT'S WISE TO CHOOSE A SIX

10,000 dealers offer you the protection of Chevrolet's new Service Policy

A new Service Policy—without question, one of the most liberal ever offered in the history of the automotive industry—has recently been adopted for the benefit of Chevrolet owners, and is now being carried out by more than 10,000 authorized Chevrolet service dealers in every section of the country.

Put into force as a signed agreement between the dealer and the purchaser, this new policy offers many advantages of special benefit to motor car owners who live on the farm.

It specifies, first of all, that every new Chevrolet car will be delivered to its owner in perfect condition—eliminating the necessity for frequent trips to the city for adjustment and inspection during the "breaking-in" period.

It provides for a free inspection and adjustment at the 500-mile mark, and free inspections every 1000 miles thereafter. It calls for replacements covered by Chevrolet's standard warranty,



The Sport Coupe, \$655, f. o. b. factory, Flint, Michigan

without a penny's cost to the owner for either parts or labor.

And it states that this replacement provision will be carried out by any Chevrolet dealer anywhere in the United States, regardless of where the car may have travelled during the period covered by the standard warranty.

Consider what it means to have a broad-gauged service policy like this to rely on. Consider its dollars-and-cents value, the protection it affords, the time it saves. And add to this the fact that only a car of unusual quality and dependability permits Chevrolet to offer so liberal a policy.

Before you consider any other low-priced automobile, be sure to investigate the many advantages of the Chevrolet Six. You'll find that, from every standpoint—price, comfort, safety, endurance and economy—it's an ideal choice for service on the farm.

CHEVROLET MOTOR COMPANY, DETROIT, MICHIGAN
Division of General Motors Corporation



More than 10,000 Chevrolet dealer service stations cover every section of America

CHEVROLET SIX

Sport Roadster, \$555	Club Sedan, \$665	ROADSTER or PHAETON	Sedan Delivery, \$595	1 1/2 Ton Chassis, \$520
Couche, \$565	Sedan, \$675		Light Delivery, \$365	With Cab, \$625
Coupe, \$565	Special Sedan, \$725		Boatster Delivery, \$410	Flint, Mich., special equipment extra
Sport Coupe, \$655				

\$495

September 20, 1930

PENNSYLVANIA FARMER

(247) 15



Dress Attractively at a Saving

No. 6821—Ladies' dress. Cut in eight sizes: 36, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 46-inch size requires 5 1/2 yards of 39-inch material. For contrasting material, 1/2 yard 39 inches wide will be required. Trimming band of lace requires 1 yard. Price 15c or two for 25c.

No. 6839—Ladies' dress. Cut in five sizes: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 5 1/2 yards of 39-inch material. For contrasting material, 1/2 yard 39 inches wide cut lengthwise or crosswise is required. Price 15c or two for 25c.

No. 6851—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. A 12-year size as pictured in the large view requires 1 1/2 yards of 39-inch material for the blouse and 1 1/2 yards for the skirt. Price 15c or two for 25c.

No. 6861—Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires 1 1/2 yards of 39-inch material. For yoke collar and tie of contrasting material, 1/2 yard is required 39 inches wide, cut crosswise. The width of the dress at lower edge of lower flounce, with fullness extended is 2 1/2 yards. Price 15c or two for 25c.

No. 6851—Girls' dress. Cut in five sizes: 8, 10, 12 and 14 years. A 12-year size requires 1 1/2 yards of 39-inch material. For yoke collar and tie of contrasting material, 1/2 yard 39 inches wide is required. Price 15c or two for 25c.

No. 6863—Boys' suit. Cut in four sizes: 2, 3, 4 and 5 years. A 3-year size requires 1 1/2 yards of 35-inch material. For contrasting material, 1/2 yard is required cut crosswise. Price 15c or two for 25c.

No. 6776—Ladies' slip. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2 1/2 yards of 39-inch material. Price 15c or two for 25c.

No. 6732—Girls' dress. Cut in five sizes: 1, 2, 3, 4 and 5 years. A 4-year size requires 1 1/2 yards of material 35 inches wide. To trim with ruffling will require 5 1/2 yards 1 1/2 inches wide, cut crosswise and plotted. A bow of ribbon requires 1 1/2 yards. Price 15c or two for 25c.

No. 6863—Ladies' apron. Cut in one size, medium. It requires 1 1/2 yards 35 inches wide. To finish with bias binding requires 7 1/2 yards 1 1/2 inches wide. Price 15c or two for 25c.

HOW TO ORDER

Write your name and address clearly. State number and size of each pattern. Price 15c each, two for 25c. Send stamps or coin. Our Fashion Magazine will help in preparing your wardrobe. Copy only 10c. Address Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.



JOYS THAT NEVER GROW OLD

HOW the Old Folks enjoy the comfort and cheer of Allen's Firelight Furnace! With the doors open, its friendly glow brings back memories of the oldtime, open fireside. But with modern efficiency, it circulates moist warm-air, heating the whole house, upstairs and down.

When the doors are closed, the ALLEN resembles a piece of beautiful, period furniture. The Credenza designed cabinet is finished in lustrous, walnut-grained porcelain enamel, and harmonizes with the latest style in home furnishings.

Because of its scientific construction, the ALLEN burns any kind of fuel at a great saving. Wide doors accommodate cord wood. Special models are made for gas.

From Alaska to Florida—from coast to coast—Allen's Parlor Furnace has brought comfort in winter to over 100,000 homes, schools, churches and stores. If you, too, want the advantages of furnace efficiency at stove cost, see the nearby Allen Dealer. He will gladly demonstrate Allen's superiorities and explain the easy purchase plan. If you do not know his address, send the coupon today.

ALLEN MANUFACTURING COMPANY, INC.
Store Specialists for Over a Quarter Century
Nashville, Tennessee

ALLEN'S
Parlor Furnace



Cheer and contentment that for centuries have been associated with the old-fashioned fireplace.



FREE BOOKLET
Interesting historical sketch on "Heat."

Send Coupon

Allen Mfg. Co., Inc., Nashville, Tenn. Please mail free booklet. I am interested in the Firelight Models Gas Models

Name _____ Address _____

FREE! 54 Piece HORN OF PLENTY DINNER SET for Selling 10 Pounds Coffee

and with every pound give to each purchaser all of the following high grade pure food products: Pound Baking Powder, large bottle Vanilla, box Corn Starch, pound Cane Sugar, box Baking Soda, can of Cocoa, box Dessert Jelly, box Pepper and Jar Prepared Mustard (as per plan 1222) and this full size, handsomely decorated Dinner Set is Yours, Absolutely Free.

SEND NO MONEY

We trust you. We pay the Freight. Hundreds of other Premiums: Furniture, Rugs, Wearing Apparel, etc., or the Cash Commission. You can also sell Household Supplies, Toilet Articles, etc.

EXTRA GIFT-WRITE TODAY

10 Pc. Full Size Silver Aluminum Set including large Preserving Kettle, Mixing Bowl, Sauce Pan, Pudding Pan, Pie Pan, Cake Pan, Dipper, Graduated Measuring Cup, Salt and Pepper Shakers, given FREE besides Dinner Set. If you order promptly, we trust you. Satisfaction Guaranteed.

Write Today for Big Free Catalog and Full Information
The PERRY G. MASON CO. DEPT. 295 Cincinnati O.

FREE RADIO CATALOG

LOWEST WHOLESALE PRICES

100 pages of radio bargains. New 1931 Screen Grid, all-electric, A. C. Sets in beautiful cases—also battery operated sets. Write today.

ALLIED RADIO CORPORATION
711 W. LAKE ST. DEPT. 724 CHICAGO

WRIST WATCH GIVEN

For each bottle of Japanese Oil. Write today for details.

Charles David, 516 V. Cincinnati, O. Sept. 1930

QUICK RELIEF

Antiseptic Japanese Oil often breaks up a cold in 24 to 48 hours. For head colds, bronchitis, inhaled vapors, for chest cold, sore throat, congestion, rub in vigorously. 40 Years Success. At Drugists.

JAPANESE OIL

When writing advertisers say you saw their ad in PENNSYLVANIA FARMER.

THE YOUNG PEOPLE

West Virginia Future Farmers

By CLARENCE MAY

FIFTEEN active Future Farmers of America, located at Burnsville, West Virginia, are carrying enterprises totaling twenty-two hogs for pork, one registered Poland-China brood sow, 4.25 acres of corn, 1.5 acres of potatoes, two registered ewes and one registered Hereford heifer.

Considering the dry season, many of the boys have done outstanding work. Mark Means has an excellent Poland-China brood sow and will probably go into the work on an extensive scale. He planted one-eighth acre of rape for pasture and has one-half acre of corn. Fred Hopkins is another boy to be commended on his work. He is carrying a registered Hereford heifer for an enterprise and one-half acre of corn. Fred is interested in Hereford cattle as a farming proposition.

William Raises Sheep

As an example, William Brown, a Future Farmer and a Sophomore in the vocational agriculture class at Morgantown, West Virginia, took twenty sheep and one-eighth acre of potatoes as his project. William lives on a 250-acre farm near Independence and finds his agriculture work both profitable and interesting.

Among the twenty that he bought with which to start his project were five pure-bred sheep. His flock consisted of Shropshires, Southdowns and a few mixed sheep. William kept his flock with his father's and together they totaled sixty-five. He treated his flock once a month with a three-ounce bluestone solution to kill internal parasites. During the fall they were fed twice each day with a mixture of bran, oats and corn. The flock was culled once a year and the culls were butchered and sold in Morgantown.

In caring for the flock a total of 32 hours of horse labor and 264 hours of man labor was spent. At least ten or more sheep were required for the project. From the entire flock, including his father's, about sixty lambs were raised and thirty of these were kept on the farm. William obtained a profit of \$278 after all costs of raising had been deducted. William is using this money to defray his expenses in high school.

The Future Farmers of America is a national association organized in 1928. The qualifications for membership are high, and as a boy becomes

more proficient in his farming activities and proves his mettle, he progresses through ascending "degrees."

As an organization, they engage in many activities such as conducting farm demonstrations, holding a summer camp, sponsoring an annual steak roast, marketing their products in carload lots, requiring all members to complete their enterprises, setting a definite goal for each member to reach, sending judging teams and



These Crawford County Four-H delegates attended the Junior Farmers' Week at Pennsylvania State College in August.

demonstration teams to fairs, sending delegates to the Annual Future Farmers' Convention, holding regular meetings and many other activities.

How a California Girl Spent Her Vacation

I HAVE had such a pleasant vacation and I want to tell the boys and girls who read our page about it. The first few weeks after school closed I busied myself with playing, swimming, etc. Over the Fourth of July the National Amateur Athletic Union swimming and diving races were held but a block from us. They were very interesting, as eight new world records were made. There were entries from Egypt, Hawaii, Australia, and other countries.

On July 11th I went to spend a week at La Jolla, (pronounced La Hoy-yah, meaning the Jewel, in Spanish). It is a suburb of San Diego, and is a beautiful town situated between



Mark Means has an excellent Poland-China brood sow.

Mt. Soldad and the rocky Pacific Coast. For its size, this little town has more artists, sculptors, writers, poets and wealthy people as residents,

there are woods, corn and wheat fields, a creek, a big garden, twenty-six different kinds of trees, barns, the farm house, and many other interesting things.

There are two horses, Dan and Rocky; two cats, Fluffy and Buff; a dog named Sheppy; a number of cows and a great many chickens. I like to play with the two cats and the dog. I also enjoy riding the horses. I gather the eggs, feed the chickens and try to help my grandfather all I can. This week I was very much interested in watching the threshers and balers. In fact, everything is interesting to me, for it has been six years since I was last back in Ohio.

While visiting friends in Cleveland, we went in the forty-seven story Union Terminal building. From this building can be seen Lake Erie, the harbor, Cleveland and many suburbs.

We will return to California on September 15th after spending seven pleasant weeks in Ohio.

We came on the Union Pacific Railroad but will return on the Santa Fe. I am sure there will be many interesting things to see in the Indian territory.

I think I have spent a wonderful vacation and one never to be forgotten. Janice Helen Purcell.

Age 12.

We hope Janice will write and tell us about her trip home. We think the Indian territory would make a fine story.—Editor.

BEHEADING PUZZLES

By MARY V. KUNDRA

1. With head removed, a windy month becomes a curved span.
2. Quite young, am I, at weddings bearing the train. Behed me, lo, I am to grow old.
3. Decapitated, a steep slope is changed to a fresh water fish.
4. Behedded, an earthen jar becomes a stone.
5. You can obtain a slimy substance from a celestial body by merely removing it's head. Answers next week.

Little Folks' Corner

Timmy Twitchet Has Visitors

By RUTH PLUMLY THOMPSON

(Continued from last week.)

The dolls, who had formerly occupied the old doll house, did not like this at all. What right had a mouse to their old home, and how dare he have a more comfortable dwelling than they! "Turn him out neck and crop, that's what we should do," exclaimed Miss Arabella one evening after they had been discussing the matter again. "Why shouldn't we spend part of our time there?" proposed Miss Nancy, smoothing down her silk frock. "No reason whatever!" said Terry Tod. "A fine, quiet neighborhood to recuperate from the excitement of the nursery!"

"But there wouldn't be any children!" put in Mary Ann. But as Mary Ann was the parlormaid they paid no attention to this remark. "Do you suppose he will object?" said Miss Arabella a bit nervously. "Of course he will object, but what if he does?" said Terry Tod. "It is perfectly legal and proper and if he makes any trouble why just call upon the authorities."

"What's all this talk about the authorities?" asked Captain Jack, who had just come in. Terry hastily explained the situation and Captain Jack rubbed his wooden hands together at the prospect. There had been no wars or excitement since the children had gone to school, and any adventure was welcome to the little wooden soldier. Late into the night they talked and planned, and Timmy, sleeping peacefully in his four-post bed, little dreamed of the trouble brewing below.

Timmy thought very hard all the time he was getting dressed. "No use to oppose 'em," he argued, "for they'd hammer me to bits in no time. No, I'll just agree to everything and maybe something will turn up."

He was so polite and attentive when he at last opened the door that the dolls felt ashamed, but the wooden soldiers had not climbed all the stairs from the nursery to the attic for nothing, and announced, gruffly, that Miss Nancy and Arabella intended to occupy their house at once and Timmy was to leave.

(To be continued.)

PASSING EVENTS IN PICTURES



1. Newport, R. I.—Photo shows the "Enterprise," the Harold S. Vanderbilt syndicate's yacht, which has been officially selected to defend the America's Cup against Sir Thomas Lipton's "Shamrock V."

2. The bi-annual cleaning of the outside of the White House takes about a month. Bright white paint is being put on the exterior. The work is under the direction of the Office of Public Buildings and Grounds.

3. Chicago, Ill.—A view showing the Palmolive Building with the famous Lindbergh Beacon lighted. The beacon was dedicated last month, with impressive ceremonies.

4. Not bananas, but an amazing exhibit of peas at England's largest flower show at Shrewsbury. They were grown at Aldenham near Elstree, are seven inches long and constitute a record of the year's crop.

5. Camp Perry, Ohio.—Pistol experts of the Royal Canadian Mounted Police who competed in the National Rifle and Pistol Matches here.

Left to right—Corp. Don Foreland, Constable J. D. O'Connell, Corporal A. Ford (Team Captain), Constable W. Mowat, and Constable J. L. Dolley.

6. Schenectady, N. Y.—Two immense steelplate frames of the largest types of electric generating units ever undertaken in shops here. The diameter of the circular hydro-electric frame is 42 feet and its weight is 138,000 pounds. Behind it is the frame for the steam-electric unit—23½ feet long, 12 feet wide, weighing 83,000 pounds. Together the two giants will generate enough energy to illuminate 290,000 homes.



Salutations of Other Countries

THE meaning of the word "salutation" is wishing health. Originally it meant an exchange of greetings by words, but it has come to mean also certain gestures that need no words. For instance, men lift their hats in acknowledging a friend or acquaintance. This custom has come down from the days when the removal of the helmet meant that the bareheaded one stood disarmed and defenseless.

Shaking hands with our right hand also is a sign of defenselessness. The right hand was the hand that held the weapon. So the custom grew of holding out that hand, showing no weapon was being carried.

Just as there are these customs which grew up in the western world in which we live, there are similar customs in other parts of the world.

African tribes.—Join hands and press thumbs. In Lower Guinea friends greet each other, saying, "Ak-kio Akkio."

Arabian.—The salaam (a deep bow,

sweeping gesture, touching hand first to the ground, then to the heart, then to the brow). The greeting is "Salaam a-lei-kum" (Peace be with you). The reply is "A-lei-kum essalam." (With you be peace).

Chinese.—Rub noses on bended knees.

Congo Negroes.—Salute their families upon returning from a journey by calling out "Okowe." The family, kneeling, replies, "Ka Ka."

Eskimo.—Rub noses.

Greek.—Kiss hand or knee, saying, "What are you doing, what are you busy in?" or "Be joyful."

Hindu.—Hand clasp.

Israeli.—Bowling to the ground seven times is a salutation of great deference or is frequently used between equals. On meeting an acquaintance one says, "Shalom aleichem" (Peace be unto you). The friend replies, "Aleichen shalom" (To you be peace). Notice how much this resembles the Arab salutation.

FREE to users of this great old **POULTRY TONIC**



A Package of this GREAT NEW POULTRY WORMER FREE!



Here's a tip on getting high-priced early fall eggs. Don't be handicapped by a long molt or poultry worms. For 60 years, poultrymen have beaten the molt by using Pratt's Poultry Regulator. Now Pratt's N-K (Nicotine and Kamala) Tablets are a new effective weapon against poultry worms.

For a short molt, help hens to build the new feathers with Pratt's

Poultry Regulator. They won't lay until they have them. Feather building requires an unusually big supply of minerals like sulphur and phosphorus. It takes much longer to get them from feed alone. Two pounds of Poultry Regulator added to the hundred pounds of mash is the extra supply hens need. It provides plenty of sulphur and phosphorus for feathers. Iron to tone and enrich blood. Calcium for bone and egg shell. Phosphorus to strengthen nerve cells. Iodine for healthy glands. Chlorine for digestive juices. Magnesium for bone and muscle. Sodium for heart action.

Valuable tonic ingredients in Regulator also help restore pep to layers after the fatigue and strain of molting or worming. Tones up digestive and egg-making organs. Puts molters back into lay weeks ahead. Gets more eggs from any mash.

And now, for the poultryman's new big problem—POULTRY WORMS—Pratt's is supplying a new improved worm tablet. N-K tablets contain fresh Nicotine and Kamala. Sealed in an airtight insoluble coating dissolved only by gizzard action. THEY GET RESULTS! We want every friend of Pratt's to know about them. See coupon below on how to get a package FREE and Postpaid.

PRATT FOOD CO., Philadelphia, Pa.

POULTRY REGULATOR

SEND COUPON AND REGULATOR TRADE MARK FOR FREE N-K TABLETS

Send us this coupon and the "Rooster and Cart" trade mark from any package, pail, bag or drum of Pratt's Poultry Regulator, and we will send you free and postpaid a special 50c package of Pratt's N-K Tablets. Also a valuable new booklet, Common Poultry Diseases.

PRATT FOOD CO., Dept. 145A, 124 Walnut St., Philadelphia, Pa.

Name _____ City _____ State _____

Dealer who sold me Poultry Regulator _____

BUY STEEN'S SUPERVISED BLOOD TESTED BARRED ROCK CHICKS FOR EARLY BROILERS
STEEN'S POULTRY FARM, Box 2, DAGSBORO, DELAWARE

BROILER—RAISERS
SHIPPING CRATES LOANED FREE

WE NEED more new laid WHITE and BROWN EGGS direct from the farm. Write for shipping cards. Our 85 years service and experience is our guarantee.
ZENITH-GODLEY CO.
171 Dunne Street, New York City

Poultry Flats

(Continued from page 8.)

In making over a barn into a poultry house, there is no set rule to go by, and it is usually best to adapt the structure to the purpose without making any major changes. The pens should be about seven feet high. Floor area follows no set rule. In some buildings I visited there was no division of the floor space, but the birds were in one large flock on each story, while in others each story was divided into pens, according to the ideas of the owner.

Window space should be provided on two sides or more where possible, especially in cases where the whole floor area is in one pen. Roosts and dropping boards may occupy the usual space at the back of the pen or, where large flocks are the rule, be set in the center of the floor space so as to be accessible from all sides for cleaning. Where this is done windows can be put in all four sides of the wall space for light and ventilation.

Artificial ventilation is provided for during the winter by flues, made either of boards or metal and equipped with dampers, extending to outlets in the roof, and by intakes on each floor. I saw no artificial heating systems provided, but there is evidence that heat pays during the cold months, and I look to see such systems in common use during the next ten years. Buildings of the barn type will be easy to heat.

Because of their height and consequent exposure to the wind, barn-type buildings require careful side-wall insulation. Where the original covering is good lining with one of the fiber sheet insulating materials now on the market will serve the purpose. One of the best ideas in covering was seen on the Guldin Farm in Berks county, Pa., where the side walls had been covered with asbestos shingles. Such shingles over sheathing paper mean a tight warm wall, and one that is permanent, fire proof and requires no painting or care.

Probably every reader of this paper is within easy driving distance of a multi-story poultry building, and where there is any idea of keeping poultry on a large scale it would pay to take a little trip for the purpose of looking such a structure over.

The poultry extension department of any of the state colleges would undoubtedly be glad to furnish information to any one who would write in as to the location of such buildings in his vicinity, and help with planning such a structure, whether it was to be remodeled from an existing barn or built new.

The Market Place

HARVESTING vegetables at the proper stage of maturity would add thousands of dollars to the farm income. I have noted many illustrations of this during the past season and there are many more that have not come to my attention. This week a load of Pennsylvania sweet corn packed in sacks arrived on the market. The corn was well formed but it was too mature. The kernels were tough and had begun to shrivel. As a result it sold for 50c per hundred ears, while if it had been harvested a week or ten days earlier it would have sold at \$2.

A short time ago there was a more striking case when 300 baskets of New Jersey string beans were shipped by a large grower to Philadelphia. They arrived at a time when string beans had been scarce and high for about two weeks. The beans were free from spot and were attractive but were too old. They were over-mature, tough and sold at \$1 per % basket. If they had been picked at the proper time they would have easily brought \$1.50.

There are many factors of marketing that cannot be controlled by the grower, but this is one that is easily managed and has a great influence on the returns. W. R. Whitacre.

Make this Test FREE

We want to show you that The GIZZARD CAPSULE sets worms when other medicines fail! Show you how easy to use, and how much better your birds will do.

Ask your Lee dealer for this sample package; or write us. Free, postpaid. Test The GIZZARD CAPSULE.

IT TAKES THE WORM MEDICINE TO THE WORMS.

An insoluble capsule carrying a triple combination medicine—for Tape, Round and Pin (sees) worms. The gizzard crushes this capsule, releasing the medicine where it pours directly into the intestines upon the worms. No medicine can be absorbed along the way, which is better for the birds. 5 times as effective because medicine cannot mix with food or drink and be weakened. The correct dose, full strength, reaches the worms. That is why use of The GIZZARD CAPSULE is so rapidly increasing. More than 60 million last year.

DON'T FEED THE WORMS

Worms live upon the food worms consume, forcing the birds to eat and reject egg production. The GIZZARD CAPSULES now. Sold at drug, food, hardware stores, chick hatcheries, or from factory, postpaid. Adult size—50c per pkg. \$1; 100-pkg. \$1.75; 500-pkg. \$7.50. NOTE—There is only one GIZZARD CAPSULE. Beware of substitutes that may be sold to you. Look for the name GIZZARD CAPSULE on the package. Made only by the inventor, Dr. GEO. H. LEE CO., 2144 Lee Bldg., Omaha, Neb.

PARKS' BARRED ROCKS

BUY YOUR BROTHERS, COCKERELS & CHICKS NOW. Prices about 1-3 less than later. Big, bushy healthy, free range raised. Mountain May pullets ready to start laying. Cockerels and cocks able to stand the ability to lay and pay in our stock. Strain is America's oldest and most successful laying strain of Rocks—carefully selected, inseminated and prepared for sale since 1889. Winners in all the leading shows. Nevada, up to 329 eggs. Laying at 175 days. Customers report flock averages up to 21 eggs. Live lowest prices and caring. J. W. Parks & Sons, Box 6, Altoona, Pa.

BARRED ROCK CHICKS

Now ready for winter broilers. Hatched every week, 100 to 1,000 lots. Prices you can afford. Special Packer FREE. Write for details. W. L. KIDDE, Box 30, Middlebrook, Pa.

ULSH'S Superior Chicks

White Wyandottes, \$2.00 per 100; Barred Rocks, \$2.00 per 100; Heavy Mixed, \$2.00 per 100; Light Mixed, \$2.00 per 100. 500 lots 100 to 1,000 lots 10 to 100. Free range. W. A. LAUVER, Box 6, McALISTERVILLE, PA.

CHICKS

Barred Rocks, \$2.00 per 100; Heavy Mixed, \$2.00 per 100; Light Mixed, \$2.00 per 100. 500 lots 100 to 1,000 lots 10 to 100. Free range. W. A. LAUVER, Box 6, McALISTERVILLE, PA.

QUALITY CHICKS

Barred Rocks, \$2.00 per 100; Heavy Mixed, \$2.00 per 100; Light Mixed, \$2.00 per 100. 500 lots 100 to 1,000 lots 10 to 100. Free range. W. A. LAUVER, Box 6, McALISTERVILLE, PA.

CHICKS

Barred Rocks, \$2.00 per 100; Heavy Mixed, \$2.00 per 100; Light Mixed, \$2.00 per 100. 500 lots 100 to 1,000 lots 10 to 100. Free range. W. A. LAUVER, Box 6, McALISTERVILLE, PA.

Quality Chicks

Barred Rocks, \$2.00 per 100; Heavy Mixed, \$2.00 per 100; Light Mixed, \$2.00 per 100. 500 lots 100 to 1,000 lots 10 to 100. Free range. W. A. LAUVER, Box 6, McALISTERVILLE, PA.

OKLA. FARMER KILLS 172 RATS IN ONE NIGHT

K-R-O (Kills Rats Only), writes Mr. —, Hulbert, Okla., brought this remarkable result. K-R-O is the original product made from squill, an ingredient recommended by U. S. Government as sure death to rats and mice but harmless to dogs, cats, poultry or even baby chicks. You can depend on K-R-O (Kills Rats Only), which has become America's leading rat exterminator in just a few years. Sold by all druggists on a money back guarantee.

More Money for Your Feeds

with **Holsteins**

Write today for "Holsteins for Profit"

The **HOLSTEIN-FRIESIAN** ASSOCIATION OF AMERICA

Room F-602, 230 East Ohio Street, Chicago, Ill.

Truck Crops

By GILBERT S. WATTS

THE season is at hand when the mail will bring the annual crop of inquiries for methods of controlling weevils in peas and beans. But why not be prepared in advance with complete and detailed information? Farmers' Bulletin No. 1273, a new publication on the subject, will give the information. It should be on the reference shelf of all who store peas and beans. To secure a copy without charge write the Office of Information, United States Department of Agriculture, Washington, D. C.

WHEN rain threatens possibility of considerable loss from cracked tomatoes often can be avoided by hurried picking before the shower begins. Under some conditions it is certain that serious loss from cracking may take place within an hour after rain begins to fall. Today we had picked about half of a field when a heavy ten-minute shower drove us to shelter. A half hour later picking was resumed. Immediately we noticed a tremendous number of fresh cracks. In the packing house later we found many more, probably twice as many, second-grade tomatoes in the baskets picked after the shower. Perhaps this was an unusual case because the soil was very dry before the shower. But on a number of other occasions I have noticed very extensive cracking shortly after a rain.

Scabby Beets

Could you tell me what causes beets to become scabby? Sometimes the whole beet is covered, while other beets in the same row will be perfect. What does lettuce need in the soil to make it heat quickly? Is chicken manure harmful as a fertilizer for strawberries? Chester county, Pa. Fred A. Cox.

SCABBY beets are caused by the same organism that causes scab on potatoes. This disease will remain in the soil for several years. As a rule serious losses can be avoided by planting beets in soil that has not been used for beets or potatoes in some time. If no scab had been present close rotations usually are safe.

Lettuce is inclined to head best in a soil that is fertile but not extremely rich. A steady, even development is likely to produce the best crop. Use a complete fertilizer having a relatively low percentage of potash.

Chicken manure should not prove harmful as a fertilizer for strawberries unless the soil already is very rich in nitrogen. However, care should be exercised to secure uniform distribution, both to avoid burning and to secure maximum returns from the manure.

To Control Club Root

H. A. HUSCHKE, director of the National Lime Association, writes: "While reading the August 23rd issue of The Pennsylvania Farmer I noticed an inquiry on how to prevent club root of cabbage. The method advocated was to 'harrow in a good application of lime, preferably pulverized limestone, before setting the plants.'"

"Just this spring the United States Department of Agriculture published Technical Bulletin No. 181T on Club Root of Crucifers. This was written by Mr. H. L. Wellman who spent several years in Wisconsin studying control methods for this disease. Mr. Wellman found that lime in the carbonate form was an ineffective control for club root, and learned also that calcium in the form of hydroxide or hydrated lime gave very satisfactory control, if applied at the rate of a ton and a half to two tons per acre before setting the plants."

Here's the GREATEST BATTERY EVER BUILT for Individual Electric Plants

Gives 50% more service than any other battery of similar size



You can get this famous battery from any authorized Delco-Light dealer. Be sure the battery you buy has "Delco-Light IRONCLAD" on the cover of the jar, on the battery strap, on the negative plates and on the glass battery jars.

DELCO-LIGHT Ironclad Battery

DELCO-LIGHT COMPANY, Dept. D-61, Subsidiary of General Motors Corporation, Rochester, N. Y.

Please send me your illustrated folder and further facts about the Delco-Light IRONCLAD Battery.

Name _____
R. F. D. _____ Town _____
County _____ State _____

Not just another battery but an utterly new type—now offered for the first time to owners of farm electric plants.

It's called the Delco-Light IRONCLAD and it is different than any battery you ever saw before. First, it's heavier and more rugged. It has tremendous reserve power that you can depend on for any emergency. It lasts longer, gives better service and costs less to use. It's the same type battery that is now used on Uncle Sam's submarine boats—in mine locomotives—in industrial trucks and tractors—in fact, wherever the last word in battery service is demanded.

Good for 4,000,000 Watt Hours!

Think of it! That's half again as long as the life of the average battery of similar size. And here's the reason. The positive plate is

built in accordance with a revolutionary new design. Active material is placed in tiny, slotted, hard-rubber tubes so it can't break away and shed, crack or peel. The negative plates are extra heavy and armor plated to resist wear. The elements are suspended from the cover. The space beneath is entirely clear. No bridges or plate supports to catch sediment and cause short circuits.

The Battery for YOU

If you want a battery that will modernize your farm electric plant—a battery that will give you years of super-service—a battery that will last half again as long as the next best—then the Delco-Light IRONCLAD is the battery for you. Write today for illustrated literature that tells all about this marvelous battery. Mail the coupon now—before you forget.

The nearest distributors are listed below. In addition there is a Delco-Light Dealer in every community.

Henry Clayton, 600 S. Delaware Ave., Philadelphia, Pa.

Suburban Electric Development Co., 5624 Penn. Ave., East End, Pittsburgh, Pa.

J. B. Mitchell & Co., Inc., 25 W. Mt. Royal Ave., Baltimore, Md.

Domestic Electric Co., Inc., 30 W. 45th St., New York, N. Y.

LOADED WITH DEADLY GERMS • SPREADING DISEASE • CONTAMINATING ANYTHING TOUCHED

THE FEARFUL 7

Biting, stinging, contaminating! Everywhere these loathsome and dangerous pests are breeding, hatching, flying and crawling. Kill them. Use pure, fragrant, stainless FLY-TOX. Developed at Mellon Institute of Industrial Research by Rex Research Fellowship.

FLY-TOX KILLS THEM ALL
Absolutely Harmless to People and Animals

Relief for Livestock, too . . .

Another scientific insecticide. Especially developed for livestock. Repels and kills. Keeps tormenting flies and mosquitoes away for hours. Kills flies, mosquitoes, fleas and lice when touched by STOCKAID spray. Will not burn or blister skin. Will not gum the hair. Will not clog sprayer. Used extensively throughout the country in nation's largest dairy barns. Harmless to people and animals. Has pleasant odor.

DIBBLE'S SEED WHEAT

HONOR The best White Wheat. Over 100 acres on the Dibble Farm, yields 37-40-43-50 bushels per acre right here at Homestead, Pa. Forward—The best Red Wheat. Crop from 15-20 bushels per acre. Either variety \$1.50 per bushel. Try and increase your wheat crop 10 to 20 bushels per acre at an extra cost of around a dollar per acre for seed. Rust-free. \$1.50 per bushel. Northern grown. Uniform and common. Alfalfa, D. B. Timothy, 90¢ per bushel. New crop for September shipment. \$3.75 per bushel. Circular Price List and Samples Free. Address Edward F. Dibble Seedgrower, Box 7, Homestead, Pa., N. Y.

WHEAT for Seed

You cannot control the market on wheat. You can, however, increase your proceeds by producing more per acre without extra expense. Hoffman's Lancaster County Seed Wheat is hardy, vigorous, clean—no cockle, eye, scald or weeds of any kind. Carefully graded. Can produce for you 5, 10 or more bushels per acre. One bushel more per acre pays for new seed. Ask today for proof and other information, also samples.

A. H. HOFFMAN, Inc., Box 427, Landisville, Lancaster Co., Pa.

Get Rid of CANADA THISTLES

The Little Wonder Weed Extirpator will positively destroy them.

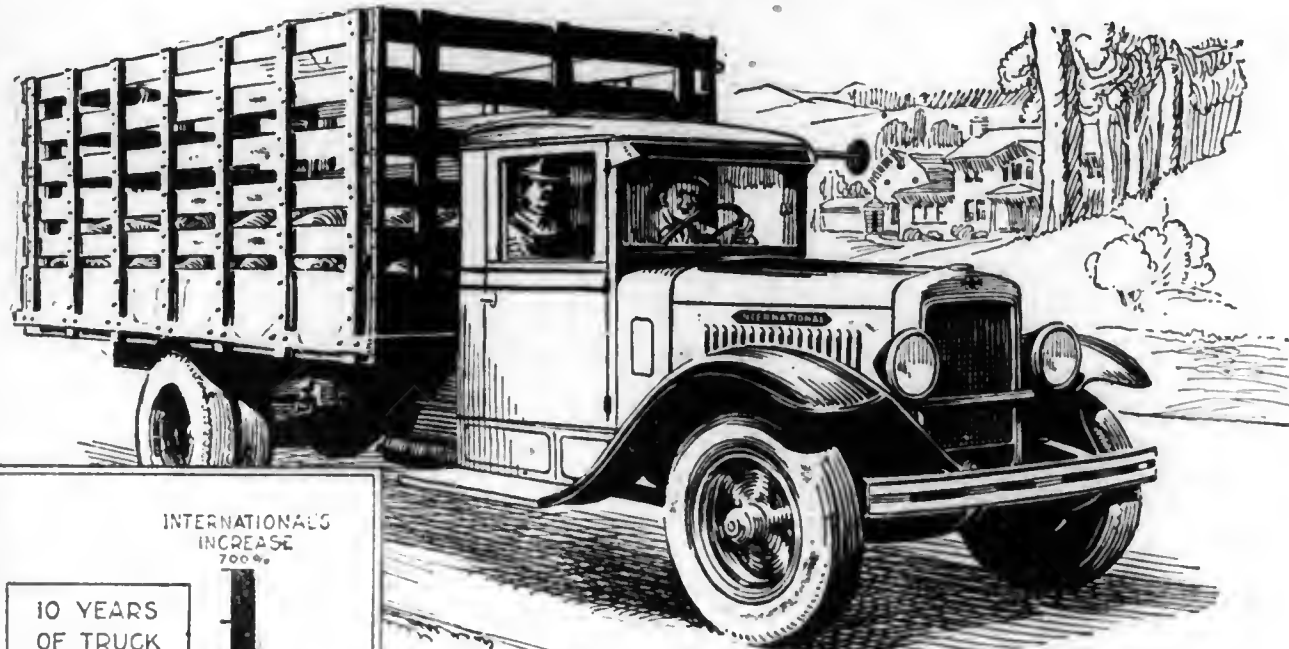
A spraying solution (not a chlorate); costs only 5¢ per gallon; will not ruin the soil nor kill cattle. Write for free illustrated booklet.

REBER CHEMICAL COMPANY
Reading, Pa.

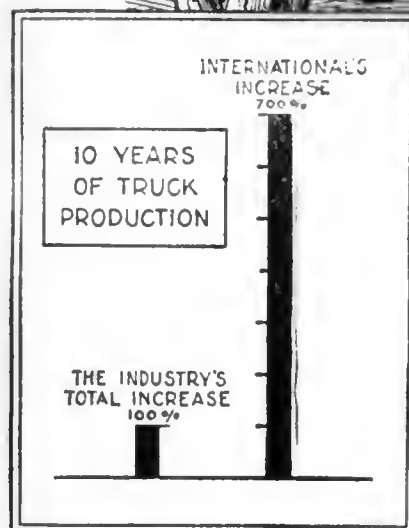
Please mention Pennsylvania Farmer when writing to our advertisers. They want to know and we want them to know that you read it all.

International's "Seven-for-One" Record

is proof of remarkable value



(Above) The New 3-ton Model A-5 International Speed Truck



Have you driven the 1-ton Six-Speed Special yet? Ask the nearest International dealer or Company-owned branch for a demonstration. Find out what it means to drive a fast, powerful truck with 6 forward speeds; 4-wheel brakes; simple, powerful engine; pressed-steel frame—a truck that's built for country hauling through and through. Other models, 3/4-ton to 5-ton.

In 10 years International Truck production has increased 700 per cent, while the total truck production of the industry has increased only 100 per cent. Such an increase from a small beginning would not be important—it is necessary that you bear this in mind also:

Ten years ago International Harvester was already a highly successful truck builder of 15 years' experience. Even then it was one of the leaders of the industry, with a production of thousands of trucks per year. Since that time International has multiplied seven times as fast as the industry has multiplied.

The march of the Company toward a dominant position in truck building is the best possible evidence of the value of International Trucks. Keep this popularity in mind when you buy a truck. It means that here are trucks ready for years of good economical service. You will find farmers everywhere enthusiastic about the Six-Speed Special and the other Internationals. Write for detailed information.

INTERNATIONAL HARVESTER COMPANY

606 So. Michigan Ave. of AMERICA Chicago, Illinois
(Incorporated)

Branches at Pittsburgh, Harrisburg, Philadelphia, Pa.;
and at 15 other points in the United States.

INTERNATIONAL TRUCKS

350 COWS 350

T. B. and Blood Tested
Two Hundred Holstein and Guernsey Springers for sale. Can be seen any day in pasture near our yards. 150 best Wisconsin cows in our Auctions every Tuesday. Every cow T.B. and blood tested to go anywhere.
WISCONSIN DAIRY CATTLE MARKET
Trevor, Wis.—On 5th Line
45 Miles S. W. of Milwaukee, 58 miles N. W. Chicago.

DAIRY CATTLE

VERY PROMISING, well grown, solid Jersey heifer, 7 mos., and one bull 6 mos., reg. Accredited herd. W. F. McFARRAN, Furness, Pa.

AYRSHIRE CATTLE of the best blood lines. Herd T. B. Accredited. Animals of both sex and all ages. Geo. B. McConnell, Wellington, Ohio

Reg. Guernsey Heifers, one 7-month Bull. Sires 19 tested. Dams average 800 lbs. Fat, T.B. & blood tested.
D. B. Eberlin, Clarion, Pa.

CATTLE

BUCK & DOE RUN VALLEY FARMS
Hereford Cattle—Poland China Hogs—Hampshire Sheep—Draft Horses.
THE SAINT AMOUR COMPANY, Martinsville, Penna.

Angus Cattle at reasonable prices. Write BAYARD BROS., Waynesburg, Pa.

HEREFORDS. Four yearling bulls, two good to kill. If you want more, write at once to L. O. McCoy, R. D. 18, Jackson Center, Pa.

REGISTERED HEREFORDS. A select herd of the best Woodford Breeding Cows, heifers and bulls for sale at reasonable prices. Large herd to select from. Fred J. Brown, Dubois, Penna.

D. S. POLLED HEREFORDS.—A fine selection. Cows, heifers, bulls. Come or write. CHAS. D. OILL, Millersport, Ohio

TWO-YEAR-OLD REGISTERED SHORTHORN BULL, T. B. tested, \$100.00.
R. E. CARROLL, West Finley, Pa.

Let your hogs harvest your corn



FREE

Illustrated folder giving full particulars regarding Page Fence. Your name and address bring it.

Cut labor costs—get more money from your stock—Increase land fertility—insure higher yields for next year's crops.

You can do it by fencing in your fields with Page hog tight Fence—known for 47 years for its lasting service. Made of uniformly best steel, heavily galvanized, in either staple tie or

wrapped stay type of knot. Ask your dealer; he will show you the best style for your needs.

PAGE STEEL AND WIRE COMPANY

230 Park Ave., New York, N.Y.

District Sales Offices:

NEW YORK PITTSBURGH

CHICAGO & SAN FRANCISCO

An Associate Company of the American Chain Company, Inc.

PAGE America's First Wire Fence—since 1883 FENCE

When writing advertisers please mention Pennsylvania Farmer

Farm & Dairy

By L. W. LIGHTY

QUITE a large number of farmers are short of feed for the coming winter. This growing season is at an end and all we can do now is to make provision for some feed to be grown as early as possible next spring. September is the month in which to do this.

Here is what a friend of mine did two years ago. He prepared a fine seedbed in a five-acre field and sowed a little more than half into rye and the rest to wheat. The rate of seeding was two bushels to the acre. He applied 300 pounds of a good standard fertilizer to the acre. The date of seeding was September 24th.

The first rye was cut and fed April 29th and the feeding was continued to May 14th when the rye was past bloom and a little hard. Then the wheat was cut and fed until June 4th. By that time the bluegrass was good and the cows were turned into that pasture.

By June 26th the rye, wheat and grass had grown to as to make a very excellent pasture. (I failed to tell you that timothy and clover were sowed with the grain in the autumn.) There was enough to last over two weeks and then the bluegrass had recuperated and was very excellent, so on July 14th this man turned the cattle to bluegrass pasture and up to August 10th the pasture was so good that he fed but a very little grain and the milk flow was excellent. From then on he fed grain, but there was still considerable pasture to the end of September by changing from one field to the other.

He assured me he never before made quite so much out of five acres of rye and wheat as he did the summer of 1929. This procedure may be very profitable on many farms for 1930 and 1931.

Marginal

We read a lot lately about marginal land. To date we have not heard much about marginal cows, but they are very abundant and in the end leave us in the same fix as the marginal land. Marginal land fails to produce enough to pay for the seed and labor we put on it and marginal cows fail to pay for the feed and labor we put on them. The marginal cow is the greatest curse to American dairying. Innumerable words have been spoken and written in the last forty years for the purpose of eliminating this cow. In small areas this has been accomplished, but at the rate the work has progressed thus far ten more United States census will be taken before the marginal cow will cease to be a factor in making prices for dairy products.

But it is right to say a word for this cow in some cases. Rather often she is unprofitable because she is badly cared for, fed too little and does not get the kinds of feeds she needs to produce milk.

Great numbers of these marginal cows could easily be put on the good side of the margin if the owner would only act a little more intelligently. The same may be said about the marginal land.

I am here to tell you and prove my words that forty odd years ago I took charge of land that was far beyond marginal, it was completely non-productive, but this season this land yielded 34 bushels of wheat and 54 bushels of oats to the acre, field drill measure and thresher's measure of grain.

This term marginal is a little new. When we out here in the woods wish to express ourselves clearly we say "On the jumping-off place," and that is where a lot of folks are.

Century Sire Dies

KING Segis Alcatraz Prilly the last of the living recorded century Holstein sires, is dead after having sired 156 sons and 222 daughters or a total of 378. Prilly was owned by the Pabst Farms of Oconomowoc, Wis.

D. C. S. to Reorganize

THE Advisory Council of The Dairy-men's Cooperative Sales Company, in its session at Youngstown, Ohio, on September 5, authorized the reorganization and recapitalization of that body at once.

With all but \$3,500 of its capital stock of \$50,000 already issued to its 20,503 members it was essential that the capital stock be raised or close down the membership rolls—and in view of the fact that the Company is now attempting organizing the Cleveland milkshed the directors deemed it advisable to increase the capital stock to permit the organization work to continue, and their recommendation was confirmed by the Advisory Council.

The Advisory Council also instructed the directors to proceed with the reincorporation and reorganization plan, so as to give the producers the protection and benefits of the cooperative legislation now existing in the three states the association serves.

"When we were first organized, there were no cooperative laws and we had to incorporate under the old Ohio corporate act," explained P. S. Brennenman, president of the organization, "and now that we are expanding our operations into the Cleveland milkshed and need to raise our capitalization, we deem it good business to reincorporate under the provisions of one of the state cooperative laws, either Ohio, Pennsylvania or West Virginia. We shall choose the state which will permit us to build the strongest and best organization."

New contracts, new by-laws and a new constitution are being constructed by the directors, in cooperation with a committee of five members of the Advisory Council, B. W. Henderson, Jefferson, Ohio; W. H. VanSoye, Barnesville, Ohio; C. E. Crowe, Andover, Ohio; M. D. O'Hara, Butler, Pa. and Ray McCandless, Montour, Pa.

Heavy Attendance

The meeting of the Advisory Council is a quarterly affair, and the September meeting, because of its importance, was the most heavily attended in years, as practically all the 143 local units had their delegates in attendance—nearly 350 of them—and there were also about 100 visitors.

"Our record for the past three-month period is very satisfactory," reported H. B. Steele, secretary. "Our income was \$36,273.94 and our operating expense for the same period was \$26,375.95, leaving a balance of \$9,897.99."

The assets of the organization are \$37,500 in excess of the liabilities, reported J. A. Matchett, Bulger, Pa., treasurer.

"We have been operating as an organization since 1917 and have sold millions of dollars in milk, without the loss of a single cent to any of our members," stated President P. S. Brennenman, in rendering his report. "We are now working in the Cleveland milkshed, to help stabilize marketing conditions there and at the same time protect our price to our members."

"Cleveland has been in a chaotic condition for a long time, and we can no longer afford to sit back and see our markets jeopardized by this milk which lies midway between Cleveland and Pittsburgh," he continued, "and last winter when a Pittsburgh dealer sold to a Cleveland dealer a string of country receiving stations in this marginal territory, taking with them some 1,500 of our members, we had no alternative but contract with that Cleveland dealer for the sale of this milk. Since then we have been besieged by requests from producers and dealers to come in and organize the Cleveland market, which we are now in the process of doing."

Meyer Co., Western Pa.
Sept. 8. Yesterday we had a fairly good rain, the best for over two months. Have not had a real soaking rain since the middle of June. Corn not half a crop. Potatoes very poor as a rule. Hay a short crop. Cows \$40 to \$75. Venis 10c, eggs 28c, butter 40c. Potatoes \$1.25 @ 1.50.
Plummer McCullough.

Uphur Co., Central W. Va.
Sept. 8. Still dry and hot, a light shower yesterday. Pasture drying up. Most farmers will feed stock soon. Water scarce. Most stock thin, as pasture was short. Stock mostly sold and shipped out. Apples about one-fourth crop. Eggs 25c, butter 40c, calves \$15 @ 25 per head. Hay crop short.
A. S. Gum.

Choose the ration which makes best use of home grown feeds

WITH hay in the barn, corn in the silo, and home-grown grains besides, you are ready to figure what purchased feed you will need to supplement these home supplies.

Seven Amco Dairy Feeds, ranging from 12 to 32 per cent in protein, give you a chance to supplement your own feeds adequately, yet without waste of protein, which is the expensive ingredient in purchased feeds. These feeds are mixed on Open Formulas, which publish the amounts as well as the ingredients.

Feed Amco 32% Supplement to make best use of your home grown grains. It will go farther and give better results, because it makes a complete, correctly balanced ration out of your own corn, oats, wheat, or barley. The necessary protein is supplied in a wide variety of ingredients, rigidly selected and freshly mixed.

Amco Feeds are mixed in accordance with the best available feeding knowledge. The open formula lets you buy intelligently. See your nearest Amco Agent for the favorable prices on these profit-making feeds.

AMCO JUNE PASTURE

A succulent feed made up of leafy green alfalfa and molasses. A real milk producer and conditioner. All farm animals like it. Many dairymen use it the year round. Feed it to the milking herd with the grain ration at the rate of 3 or 4 lbs. a day per cow.

DISTRICT OFFICE:

MUNCY, PENNSYLVANIA.

AMCO FEED SERVICE
DIV. OF ALLIED MILLS, INC.



Price - - \$110
F. O. B. Lancaster

NEW Peerless Combination Mill
Grinds Anything Raised on Farm That is Fed to Livestock.
Write for catalogue.
A. M. DELLINGER, 723 N. Prince St., Lancaster, Pa.

Buy now. Pay later
A MONEY MAKER
Better feed—lower costs—more profits. Booklet "Users Own Words" written by owners proves it. Write for free copy. Write your name and check below items for illustrated folders.
The Ross Cutter & Sift Co.
239 Warder St., Springfield, O.
Established 1850

Silos Stanchions
Cattle Cribs
Hog Houses
Brooder Houses

Less than 2¢ PER RUNNING FOOT

New Kind of Fencing
Lower Prices on Farm and Poultry Fences
We have a new kind of fence. It is the greatest improvement in fencing in 50 years. It is called "The New Kind of Fencing." It is made of wire and is very strong. It is the best fence for farms and poultry. Write for new free catalog today. Wm. Brown, THE BROWN FENCE & WIRE CO., 999 1/2 1/2 CLEVELAND, OHIO

GIBBS TRAPS ARE BEST
They hold what they catch—and add to your profit. They let you use them over and over. Send for our NEW Catalog. FREE. It will tell you all about them. Write for it. Wm. Brown, THE BROWN FENCE & WIRE CO., 999 1/2 1/2 CLEVELAND, OHIO

Navy Brand Concentrated Buttermilk
From Tuberculin Tested Cows
28 per cent milk solids, 7 per cent lactic acid. Thick as custard with no foreign ingredients. Reduces buttermilk and lessens desire from cows. Increases egg production and promotes fertility and hatchability of eggs for chicks, ducks and turkeys. Sold direct from the factory in barrels of about 485 lbs. Half barrels, about 200 lbs.
Write for prices.
TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, PA.



New FREE BOOK

New Styles - New Colors

Now only \$5.00
ON ANY RANGE,
HEATER OR
FURNACE DOWN

Kalamazoo Stoves
and ranges approved
by Good Housekeep-
ing Institute

SAVE 1/3 to 1/2 at Factory Prices

New, Free, fresh from the press... Kalamazoo's 30th Anniversary Sale Book. Full of surprises—sparkling with color—alive with NEW features! 200 styles and sizes of Quality Stoves, Ranges, and Furnaces—bigger values than ever—Factory Sale Prices that save you 1/3 to 1/2. And a brand NEW Credit Policy—NOW ONLY \$5 DOWN on any Stove or Furnace regardless of price or size. Write for this wonderful NEW FREE Book Now!

A wide variety of Cabinet Heaters—the NEWEST styles, in Black and in rich, Walnut Porcelain Enamel finishes. Bargains that will open your eyes. Quality unbeatable. Don't order a Cabinet Heater until you receive this NEW Book and compare Kalamazoo Quality, Terms and Prices with others. Look through the Furnace Section, too. NEW improvements—easiest terms.

Utica, New York. Furnaces in 48 hours. No delay. Safe delivery guaranteed.

Where's your pencil? Sign the coupon NOW, and mail today. Modernize your kitchen with a colorful Kalamazoo Range—as easy to clean as a china dish. Brighten your home—lighten your work. All Kalamazoo Ranges are approved by Good Housekeeping Institute.

Send us a rough sketch of the floor plan of your home. We'll furnish you FREE plans—no obligation at all. We'll show you how easy it is to install your own furnace—thousands have. You can save \$40 to \$60 on a Kalamazoo furnace. Exclusive Kalamazoo furnace features are Hot-Blast Firepot, new ring type Radiator, easy shaking Grates, upright Shaker. You can order on the easiest of terms—this NEW Book gives you full information.

Modern Coal and Wood Ranges, and Combination Coal and Gas Ranges, in glistening, colorful, Porcelain Enamel. (Your choice of 5 beautiful colors—Pearl Gray, Delft Blue, Ivory Tan, Nile Green, Ebony Black). NEW gas stoves. NEW gas ranges, and NEW oil ranges—all in fascinating colors. Also Washing Machines, Refrigerators, Kitchen Cabinets, Vacuum Cleaners and other Household Goods—all at big savings. You simply can't afford to be without this Book—it's the best friend your pocketbook ever had.

Mail coupon TODAY! This sensational NEW FREE Anniversary Book has more bargains than 20 big stores—a thrill on every page for thrifty families. 750,000 satisfied customers have saved 1/3 to 1/2 by buying direct from the factory. Factory prices are always lowest. There's nothing between you and Kalamazoo but the railroad tracks. Kalamazoo Terms are NOW easier than ever before—some as low as \$3 down, \$3 monthly—and a YEAR TO PAY. No stove or furnace over \$5 down. Kalamazoo gives you 30 days' FREE TRIAL in your home, 360 days' Approval Test, a 5-Year Guarantee on materials and workmanship, a \$100,000 Bank Bond Guarantee of satisfaction.

Kalamazoo is close to you—all stoves and ranges shipped within 24 hours from Kalamazoo, Michigan or factory branch in



Cabinet
Heaters \$38.25 up

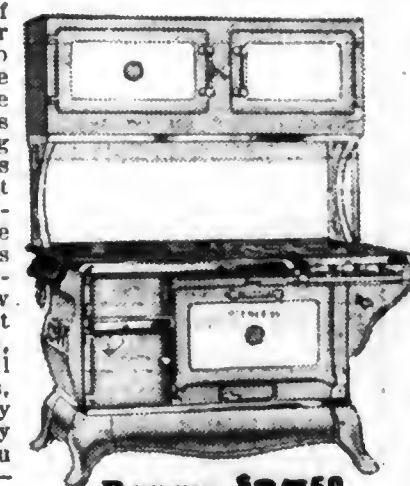
Don't shiver through another winter. Don't subject your family to winter ills and doctor bills—that's poor economy. Nothing will bring you so much comfort and happiness as a NEW Kalamazoo Cabinet Heater. Built like a furnace. Gives you healthful circulation of warm air. Holds fire overnight. Heats 3 to 6 rooms. Your choice of black or Walnut Porcelain Enamel—only \$38.25 up. And just think, you can order NOW for only \$5 down.

"We received the range in good condition. We are very well pleased with it. It has proved satisfactory in every respect. Everyone seeing it exclaims, 'Oh! what a pretty stove! It is the best heater and baker we ever had.'" W. P. SHAFER, Franklin, Pa.

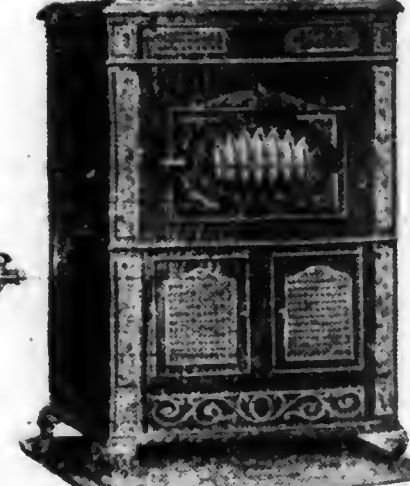
You have heard of Kalamazoo Quality for 30 years. Kalamazoo stoves and ranges are built in our big 13 acre factory. Kalamazoo has tremendous buying power—that means purchasing the best raw materials at lowest prices. Big scale production enables us to manufacture efficiently at extremely low cost. By selling direct from factory to you, eliminating entirely all "in-between" profits, you get absolutely rock bottom factory prices. Understand you buy from a factory—not from a mail order house, a wholesale house, or a retail house. You get lowest Factory Prices.

Mail coupon TODAY for NEW FREE Book.

Furnaces \$61.95 up



Ranges \$37.50 up



KALAMAZOO STOVE CO., MFRS.
141 Rochester Ave., Kalamazoo, Mich.

Warehousing and shipping points, Utica, N. Y. and Kalamazoo, Mich. (Write only to Kalamazoo.)

750,000 Satisfied Customers Have
Saved Money by Mailing This Coupon

Coal and Wood Ranges ☐ Important: Be sure to put an (X) in column at left to indicate articles in which you are interested.

Gas & Combination Ranges ☐ KALAMAZOO STOVE CO., Mfrs., 141 Rochester Ave., Kalamazoo, Mich.

Gasoline Ranges ☐ TWENTY SIRS: Please send me your FREE catalog.

Cabinet Heaters ☐ Name..... (Please print name plainly)

Pipe Furnaces ☐ Address.....

Direct Heat Furnaces ☐ City..... State.....

Oil Stoves ☐

Household Goods ☐

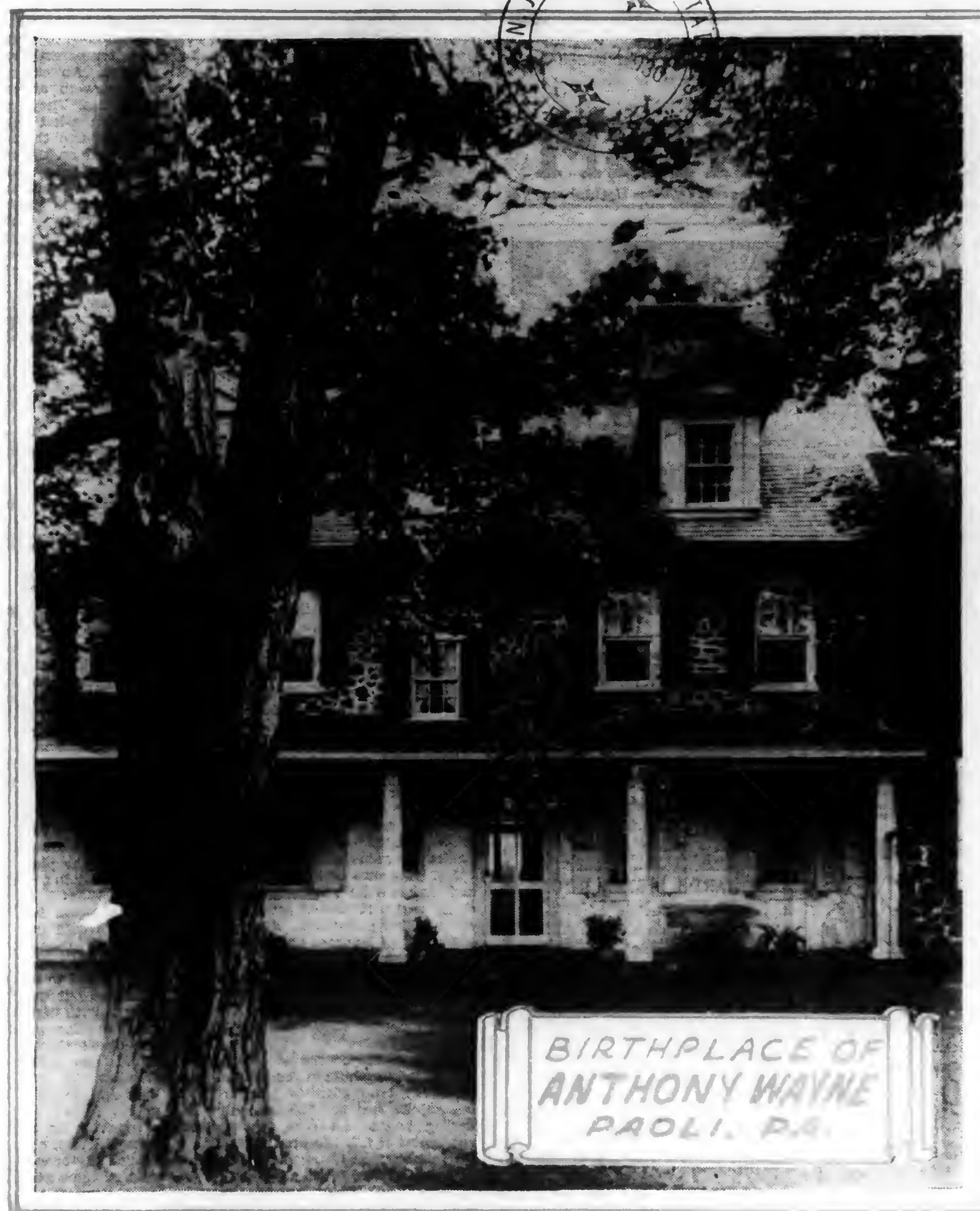
PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

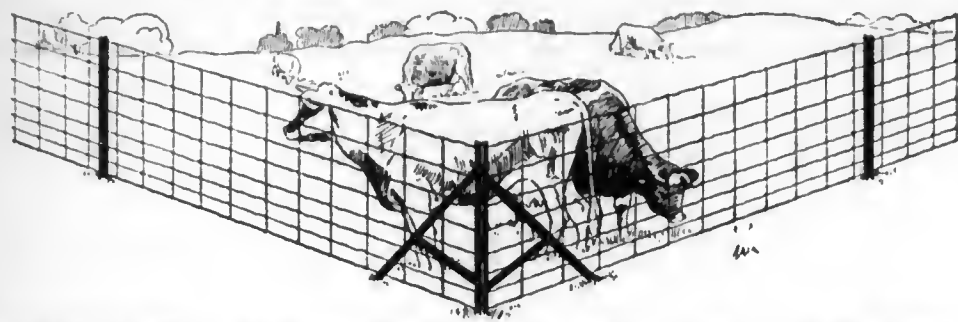
September 27, 1930



Philadelphia

Pittsburgh

Harrisburg



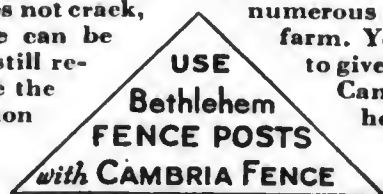
YOUR LIVESTOCK IS SAFE BACK OF CAMBRIA FENCE

You will find Cambria Fence a stout, durable barrier that marauders cannot pass. Your livestock is perfectly safe back of Cambria Fence.

Cambria Fence is a woven-wire, hinge-joint, cut-stay, standard field fence. Full-gauge wire is used in its manufacture. The wire has a heavy zinc coating which does not crack, flake or peel. The fence can be tightly stretched and still retains its shape because the Flexo Joint and Tension

Curve give it resilience, strength and serviceability.

Bethlehem invites you to make a thorough investigation of Cambria Fence. Learn for yourself why farmers everywhere are finding it the ideal fence for turning livestock, protecting crops, and the numerous other uses about the farm. Your dealer will be glad to give you information about Cambria Fence, and Bethlehem Steel Fence Posts.



BETHLEHEM

BETHLEHEM STEEL COMPANY, General Offices: Bethlehem, Pa.

WATER IN LIGHT BREEZES

The New STAR

The New Star Windmill pumps in 8 to 10 mile breezes because it is correctly designed—equipped with Tension Springs and properly lubricated—every morning put into operation.

Get this Book

We will send you FREE our book which shows how easy and inexpensive it is to have the modern convenience. It shows how to figure and install a water system powered with the New Star, the windmill that pumps in every breeze. Let us send this valuable book without obligation. Write TODAY.

FLINT & WALLING MANUFACTURING COMPANY
24 Old Street, Kew-Forest, Ind.
By THE BUILDERS OF HOOSIER WATER SERVICE

★ STAR WINDMILLS ★

Grind and Feed your Wheat

At present prices, make more money by grinding and feeding your wheat instead of selling. Pound for pound, wheat has the same feeding value as corn. Grinding wheat increases its value 16% to 25%. You will cut feed costs and build up hogs, steers or milk flow by grinding all your grains and roughage with a Papec Hammer-Type Grinder, using 10-20 tractor horsepower. Papec's automatic Governor Feed Control does away with hand-feeding. Send for free Grind Booklet. Tells how grinding lowers cost of any feed. Write today.

PAPEC MACHINE CO.
789 North Main St.,
Shoreville, N. Y.
Fred and Housage
Grinders, Ensilage
Cutters, Hay Choppers

HEREFORD Calf Sale!

30 Steers and 20 Heifers
To be shown and sold at the Kanawha County Fair, at 1 O'clock
WEDNESDAY, OCT. 1, 1930

These calves will average in age approximately six months, and will weigh around 500 lbs. All will be high grade or pure-bred Herefords, and will be better broken and well started on feed. Fair grounds six miles west of Charleston and one mile west of Dunbar, on Charleston-Point Pleasant Highway, No. 10.

E. C. GREENE, Supt., Kenosha, W. Va.
C. L. POWELL, Asst., Charleston, W. Va.

EDWARDS SAYS YOU CAN SAVE MONEY ON METAL ROOFS

For Home or Barn, Any Style
Beautiful, permanent, easy to install. Individual or cluster shingles. Round, metal tiles; or in sheets, plain or corrugated. Standing seam, or v-crimped. Painted or galvanized. Or, if you want the very best, genuine rust-resisting, copper-cladding, steel.

EDWARDS METAL ROOFS
resist fire, lightning, wind and weather. We control every operation from the raw material to the finished product.
We sell direct to you at manufacturer's prices and fully guaranteed.
Write today for samples and roofing book No. 1391

The Edwards Manufacturing Company
9311-1591 Butler St. Cincinnati, Ohio

Don't let horses suffer . . . Reach for ABSORBINE

For 38 years farmers have relied on Absorbine, when strains and sprains threaten lameness. Brings quick relief to sore, swollen tendons and muscles. Aids healing of ugly gashes, sores. No blisters, no lost hair, no lay-ups. Famous for economy. \$2.50 a bottle—all druggists. W. F. Young, Inc., 354 Lyman St., Springfield, Mass.

Farm Facts and Fancies

By ALVA AGEE

SOME of the appeals to feed wheat are not wisely phrased, as it appears to me. We are told that wheat prices will be much higher if wheat is fed liberally as a substitute for coarse grains, and that which remains for market will bring a profit to the grower. If the higher price were probable, the inclination would be to keep the wheat for sale later on, letting some one else do the feeding of his crop. The advice would come with force to any one if he owned all the corn and all the wheat, but the reason given for feeding wheat can mean nothing to the individual farmer on his own farm. He must have some other basis for determining whether he will feed or sell his wheat.

Granting that I could not know anything of any particular value, I should like to say: There is a far greater shortage of corn than there is an excess of wheat in this country. Taking into account the shortage in other feed, including pasture, there would be room for the use of all surplus wheat for feeding animals if the normal supply of animal products were maintained. On the other hand, there is reason to believe that the world could get along well enough without any supply of wheat from this country this year, and would do so rather than pay a high price for its wheat. Nobody can know at this time, but I think that is a good guess.

Wheat and Corn

Then does it not appear that the only decision to be made is whether the market outlook for animals and animal products justifies the feeding of corn and wheat, taking it for granted that the wheat will give somewhat better returns than corn, for ton for ton, for some kinds of livestock? This means acceptance of the idea that the price of corn will govern the price of wheat, the latter have advantage chiefly in the fact that unseen foreign demand might affect the latter favorably.

We are told that more money usually is made in feeding high-priced grain than low-priced, and it is staggering to take the loss from pushing half-fed animals on the market this fall, but the only point I am trying to make is that the sound reason for feeding wheat on one's farm is the probability of some profit from the feeding, and any effect on the level of wheat prices is not a consideration.

Back to Rye

The total acreage seeded to rye this fall will be large. It will be needed for pasture and for hay. The latter is poor unless the rye is cut early, and then curing is difficult, but especially for pasture rye temporarily regains some of its old-time favor. It grows under bad conditions and makes a lot of pretty good feed. Sown early, it makes good fall and early spring pasture. Of course we can think of legumes and other crops to be preferred, but one sure and quick means of adding to the farm's ability to carry the livestock until next summer is to seed rye.

Fish

Water is the source of a considerable supply of human food. Man has improved land animals wonderfully, but as one watches the unloading of fishing boats and sees the perfect specimens of fish life brought in daily for human food he is glad to realize that nature can get along pretty well in some lines without man's intervention. It is a very idle speculation to wonder just what improvements would result if man could control the breeding and the feeding, introducing his herd books and blue ribbons, but nature year after year provides us a large amount of food from the water and man cannot grab the credit. Taking

ing fish by use of large craft, with long cruising range, has had rapid development in recent years on the Western Coast, and the day may come when production will be cut down. Instead of a cooperator with nature, man certainly is a destructive force in this line of food production.

Controlled Marketing

When organized industrial production keeps the supply of anything down to the point the consumer must pay a satisfactory price, we say that is good business. Equally, everybody agrees that farmers should control their production. When they cannot do that, the next step is to consider ways of controlling the amount sent to market. In the case of perishable stuff, that means letting the surplus rot on the farm, and a few groups of growers are trying the plan with some immediate degree of success. Their conditions are unusual in that they have temporarily a monopoly in production. An example is the case of the growers of canning peaches in California. They agreed with the canners to market only a fixed quantity of fruit, and the remainder was not to be put on the market.

I have been watching the sale of peaches at retail in a city's markets. Good fruit is offered at four pounds for twenty-five cents, and is not free of the public. The public is fond of this fruit, but does not like to pay so much. Probably nine out of ten of the people going to market do not know anything about the fruit that is left on the farm. One is getting only the same kind of experience he has when he pays a stiff price for a manufactured article because the supply is kept limited, but it is a certainty that there is more resentment when perishable food is held off the market than when manufacturers hold down production. I am merely stating the case as I seem to find it.

Friendly Talks

By Edgar L. Vincent

SOMEbody brought in a stem of that little, short plant we farmers folks call pennyroyal. It had been years since I had seen any of it, and immediately memory took a journey into a far country. Once more I saw myself working in the field miles away when I was a little boy. All at once I smelled something so sweet, so delicate in its perfume.

"What is it, Father, that smells so nice?"
"That, why, that's pennyroyal." And we hunted around until we found a sprig of the plant. Then I went on.
"Why didn't we smell it at first, Father?"

"You had to step on it before it would give out its smell."

I have thought of that a great many times since then. So many things have to be crushed before they will send out their true fragrance. It was so with my father and the thousands of other men who went away to the Great Civil War soon after we found the pennyroyal out in the meadow. They had to give up their lives and lie down in far-away lonely places before this nation could be saved from the blight which had come upon it. Every great principle is established through suffering on the part of some one. All the good things we enjoy today have been bought at the cost of toil and care and sacrifice. Just as the pennyroyal leaves must be crushed before it sheds its perfume.

This is the price of good men. They cannot be had any other way. The pennyroyal must be hurt before its fragrance comes out to cheer and to bless the world.

Farm Practice

By W. D. ZINN

FROM half a dozen states a statement like the following has come to me: "The severe drought has killed all the grass sown in the wheat and oats last spring. What can we do to grow something to feed our livestock next year?"

Who knows but what this drought may yet prove a blessing in disguise? Farmers need to be resourceful. We need in a case of emergency to know how to deviate from the beaten track occasionally and learn to do something new. The present time is a case in hand.

If farmers will now set about to do it more roughage will be produced next year than has ever been grown. We have suffered greatly in our pastures on account of the drought, but our greatest loss is in the short hay crop. Thousands of acres of stubble fields lie bare. This alone would secure another great loss if they were allowed to pass through the winter in that condition.

Loud in Praise of Vetch

If the farmers want to produce feed for next year as well as to prevent the leaching of plant food from these stubble fields this winter they should sow them to wheat and vetch, sowing two bushels of the former and 15 pounds of the latter. The vetch should be inoculated. One of our best farmers, Mr. Frank Maxwell of Upshur county, W. Va., is sitting easy now, for he has harvested fully one hundred tons of wheat and vetch hay. He has fed it before and is loud in its praise. The drought did not affect this crop, because it was harvested before dry weather had had much effect on the crops.

Wheat hay is both palatable and nutritious. It should be cut just when the wheat comes into head, but it does not lose feeding value like rye if not cut on time. The writer was a strong advocate of rye hay, but he turned to wheat hay when he learned that rye made poor hay if it was allowed to stand too long. The weather was often so rainy that he found it often impossible to cut the rye when it was ready to cut.

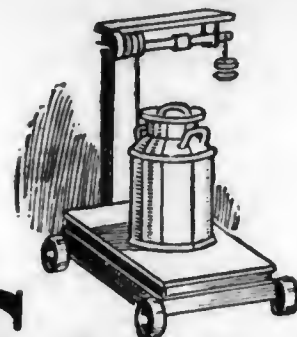
Drought May Be a Blessing

The most valuable part of this hay, of course, is the vetch it contains. It is much richer in protein than alfalfa. In order to obtain a considerable growth of vetch this fall the wheat and vetch should be sown just as soon after the fly-free date as it can be got in the ground. I have seen vetch as late as October 10th and raised a good crop, but I would advise earlier seeding when possible.

When I began this heavy seeding of both wheat and vetch I feared that it would choke out the clover and alfalfa sown in the spring, but to my surprise I succeeded better with those crops than I did when I sowed the wheat for grain. The reason is now apparent to me. We cut the wheat early and that gave the clover and alfalfa a chance to grow. We always got a good crop of clover and alfalfa hay from the wheat stubble. We often made two tons per acre from this cutting.

We continued to grow wheat for hay ever after the first attempt for the reason that it paid better than a grain crop. The first crop produced from one to two tons and the second crop two tons, making at least three tons of hay per acre, which in West Virginia is worth more than an average crop of wheat. If this drought induces farmers to grow better crops and take better care of their meadows I can see how it may be a blessing in disguise.

Experiments show that the nitrogen in legumes turned under as green manure is more readily available for plant growth than that in stable manure.



"Milk Production Steps Up 600 lbs. Each Month"

Says Uncle Charlie



Harry Lahur credits B-B Feed for increased income

HARRY LAHUR, well-known dairyman of Fair Haven, Vt., has found that B-B feeds have a remarkable effect upon profits. He writes: "A few weeks ago I began feeding B-B Dairy Ration to ten cows. Almost immediately I got 20 pounds more milk a day . . . and that increase has been maintained. Six hundred pounds per month extra goes a long way." Any dairyman will agree with that.

No Question About Profits Here

After a year's test of Bull Brand, H. C. Black, Onondaga, N. Y., has this to say: "My 22 cows produced \$8184.50 for the year. The cost for B-B was \$1910.05. I experienced ab-

solutely no udder trouble and the cows finished the year in as fine physical condition as the most exacting dairyman could wish."

"I never have produced as much milk as I have since using B-B exclusively," says C. M. Probst of Parkersburg, Pa. "The second day on this feed I shipped more milk and they are keeping it up." As Mr. Probst's letter indicates, the results of B-B feeding are apparent immediately.

How's This for a Fair Offer

I want you to give Bull Brand a trial because I know that once you've checked results you'll never use anything else. All I ask is that you go to your local Bull Brand dealer and get enough B-B to feed one or two cows according to directions for a 30-day period. Then watch the milk flow increase.

And if Bull Brand doesn't prove to be more productive per dollar of feed cost—hand the empty bags back to the dealer. He'll pay you back, without question, every cent you paid for the feed. If by any chance your dealer hasn't stocked Bull Brand yet, write to me direct.

MARITIME MILLING CO.
Buffalo, N. Y.



Another Record with B-B Feed
Velma Dale Rag Apple, owned by McLaury Bros., Portland, N. Y., produced 7,698 pounds of milk during 84 days, an average of 91.6 pounds daily. She was fed on B-B Hi-Test Dairy Feed.

SHEEP CORRIEDALES

The Coming Farm Flock Sheep

Use Corriedales on your fine wool ewes, save the ewe hands and have the best breeding flock you ever owned. A great opportunity this year. A few fine yearling rams at \$20.00 to introduce. Also good Merino rams at \$25.00 and up.

J. F. WALKER & SON,
Woodbine Farms, Gambier, Ohio

REGISTERED SHROPSHIRE. Vigorous, well-grown rams of good type. Priced very reasonable. A. F. MERRELL, Geneva, Ohio

THIRTY REGISTERED SHROPSHIRE, one and two-year-old rams, bred by our imported rams, HYLLMEDE FARM, Beaver, Pa.

SHROPSHIRE and OXFORD RAMS. \$25 up. Satisfaction guaranteed. PIONEER STOCK FARM, Arcata, Ohio

REGISTERED SHROPSHIRE RAMS

L. M. HEIGHWAY, Bluffton, Ohio
REG. HAMPSHIRE DOWN RAM, 1 year old. Good individual, with best of breeding. H. W. ALLISON, Mercer, Pa.

HAMPSHIRE and OXFORD RAMS, and Oxford Rams, bred by our imported rams. J. W. TAIT & SONS, Mercer, Pa.

LINCOLN RAM LAMBS
From imported stock. S. C. Sigler, Loudonville, O.

Fancy Southdown Rams and Ewes from one of the oldest breeders in Ohio, at reasonable prices. W. U. NOBLE, Boston, Summit Co., Ohio

A few choice Southdown Rams For Sale. Address: W. U. NOBLE, Boston, Summit Co., Ohio

DELAINE RAMS
As fine as grow, shipped on approval. F. H. Russell, Box 29, Wakarusa, Ohio

HORSES

ANNUAL PUBLIC SALE PERCHERON MARES. Fillies Young Stallions, Wednesday Oct. 29. W. S. CORSA, Whitehall, Illinois

SWINE

LARGE BERKSHIRES all ages of usually for sale. Dilts & German, Roseville, Ohio

125 BIG TYPE, registered Chester Whites from big breeders and big litters. Priced right and shipped on approval. C. E. Cassel, Hershey, Pa.

Feeding Pigs, 15 to 50 lbs., \$4.50 to \$8.00 according to size. Truck delivery on large lots. Mostly Poland Chinas. Stanley Short, Cheswold, Del.

HAMPSHIRE PIGS. Eight weeks old, both sex, one pair. J. J. RAILING, R. 2, Shippensburg, Pa.



The Home of the Feed that's Guaranteed

Your Opportunity

Prices Based Upon Earning Power

Farms For Sale

The time to buy farms is when you can get them at prices assuring you a

Low Overhead and Capital Investment

We have the type of farms to meet your requirements.

Write - Dept. H,

The Federal Land Bank of Baltimore, Md.



8 EVERGREENS SPECIAL \$1.80
Bring New Beauty to Your Garden
Special Offer for Fall Planting
This Offer Good for 1 Week
Get Yours While It Is Good
Collection consists of 2 Arborvitae, 2 Mugo Pines, 2 Balsam Fir, 2 Juniper Communis. Fall is Best Time to Plant.
All trees 1 to 4 years old, twice transplanted, which means good root systems. A real bargain! All from our nurseries.
Colorado Blue Spruce \$1.10
King of Evergreens 4 for \$4
8 to 10 year old trees 3 times transplanted, 5-yr.-old, twice transplanted, 2 for \$1.10
Hardy Asiatic Nudiflora Coral Pink blooming size each 98c
Hardy Hydrangeas, Nicotia Blue, one-year-old plants, 2 for \$1.25
Mienola Trees, 1 1/2 to 2 ft., each \$1.25
Rhododendrons, Pink, Red and Purple, 1 to 1 1/2 ft., 3 for \$1.25
Catspaw Bell, all colors, 8 for 98c
Forsythias, all colors, 8 for 98c
Columbus, all colors, 8 for 98c
Delphinium, all colors, 8 for 98c
Painted Daisy, all colors, 8 for 98c
Oriental Poinsettia, all colors, 8 for 98c
Hollyhocks, all double, 8 for 98c
Yellow Daisy, 8 for 98c
Hardy Marigolds, yellow, 8 for 98c
Guillardia, assorted, 8 for 98c
Rudbeckia, purple, coneflower, 8 for 98c
All One-Year-Old Plants
These MUST Be Planted NOW to Bring Flowers in Early Spring
FREE-Burgan Catalog with Every Order
Add 15c for Packing and Insurance

New Market Perennial Gardens
74 RANDOLPH ROAD
New Market, New Jersey

Get Rid of CANADA THISTLES
The Little Wonder Weed Exterminator will positively destroy them.
A spraying solution (not a chlorate), costs only 6c per gallon; will not ruin the soil nor kill cattle. Write for free illustrated booklet.
REBER CHEMICAL COMPANY
Reading, Pa.

HAYBALERS
Built for Capacity
and turn out neat bales of hay or straw.
This is a money maker.
Write for description and size. Bulletin 1138
A. B. FARQUHAR CO., Limited, Box 1146, York, Pa.

WANTED—Farm Products
oultry, Eggs, Potatoes, etc. Write for information.
GIBBS & BRO., 321 N. Front St., Phila., Pa.
Dept. A.



ONE of the discouraging phases of democratic government is the ease with which smart men can fill the eyes of the common people with chaff so that they cannot see the important issues of government. In many of the states this fall important elections are to be held. Questions vital to the public interest are to be voted on, questions relating to tariff, international policies, peace and war, taxation, etc. But instead of trying to bring all possible light on these things, certain interested people are crowding them back by insisting that the all-important thing is: Shall people have a free chance to guzzle booze to their hearts' content?

Of course there has always been more noise than brains in evidence during political campaigns. Always the few have made prominent some particular subject in which only the few had any real interest, and that interest was mostly personal. But never in my experience has there been so unimportant a matter made the sole issue as is the case this year.

All this is not very flattering to us, the "common people." It stigmatizes us as being gullible and easily led. But how are the common people to learn about important matters at long distance except through the newspapers? And when newspapers lend themselves to spreading any given propaganda the people are bound to be misinformed.

To add to our national difficulties, there is a growing gulf between country and city ideals. An editorial in a prominent city daily said recently, in arguing for the repeal of restrictive laws, especially the 18th Amendment and the Sunday laws, that the cities had outgrown the Puritanical ideals and only in the country was the Puritan spirit to be found now. In other words, the editor intimated that the country people were as a millstone about the neck of progress.

I am always incensed when any aspersions are cast against country people. First, because my study of history and my observations over a half century convince me that the people in the wide open spaces have a chance to study fundamental questions uninfluenced by the distractions of superficial things about them; that they can thus arrive more nearly at the truth about important matters than those who are surrounded by the glare and bustle of city life. Second, I suppose my ire is aroused by "slams" made at the country mind because the roots of my being on all sides are planted firm in the soil of the country. Because of my belief in this idea (call it prejudice if you will) I tremble for the time when the cities shall dominate absolutely in our government.

But it is of no use to get all "het up" over such things. All any one can do is to live his own life and use his influences sanely and calmly. And so to more important matters.

A new boy arrived at Neshaminy Gardens on the 7th inst. That makes three young gentlemen now planted and growing with the trees and vines on the place, and all are doing well. They are proper causes of pride. All that is needed for any of them to become fruitful and profitable is wisdom, patience and right cultivation. It is seventeen years ago this week since we migrated from Clearfield to Bucks county. At that time four of us gathered about the table. Now,

when the entire family shall foregather, there will be nine. Verily, life is worth living!

For the third time we notice a difference in the ripening of the two rows of grapes. They are planted side by side, eight feet apart each way. The rows run east and west, and the row on the south side ripens first and best; not only that, but the grapes seem to be a little larger than those on the north side row. Can any one explain why this should be so?

Some time ago I wrote that the Sheridan grapes had a full crop for the first time this year. I like the flavor of these grapes as well if not better than the Concord, although



This stone and rail fence is located in Tioga county, Pennsylvania, and was built about 1880 by Willette S. Colegrove. According to information furnished by his daughter, Mr. Colegrove did not split the rails as they were available when he built the fence.
A. B. Deane.

Pasteurized Cider

By S. W. FLETCHER

Can you inform me of the process whereby cider is kept sweet indefinitely by subjecting it to heat without the use of preservatives? I have heard there is such a process. C. G. Howey, Philadelphia county, Pa.

THE most concise and practical statement on the preparation of pasteurized cider, that I know of, is found in the report of an address of H. G. Ingerson of Chardon, Ohio, at the Sixth Annual Horticultural Week at the Pennsylvania State College, November, 1925. This is published in the Proceedings of the State Horticultural Association of Pennsylvania for 1929. I quote it herewith:

"After the cull apples are separated from market grades, they are again carefully sorted to eliminate any wormy fruit or any showing the least sign of decay. Varieties are blended at this time to give the best cider possible. A little extra tartness is desirable in juice to be pasteurized.

"The fruit next goes into a mechanical washer where water is sprayed on it under pressure. The apples are not carried in a solution, but are receiving fresh water for the several minutes that they are in the washing apparatus.

"After pressing, the juice is pumped into storage tanks, and held in this fresh condition for at least three weeks. In the fall of the year it is necessary to have artificial refrigeration with temperatures of 30 degrees or below. During the winter months, with the apples at about 32 degrees when pressed, the juice will remain sweet for a three-week period if the room temperatures are about 30 degrees. Storing the juice in bulk

that is not the judgment of all the family. But I fear few of them will ripen to perfection this year. Probably because of the drouth, the Sheridan vines dropped all their top leaves some time ago, leaving the bunches fully exposed to the sun. Now, whether it is due to the exposure or whether the lack of leaf function during the ripening period prevents the full ripening process I do not know, but the berries remain reddish brown instead of turning the usual purplish color.

The Stayman apple trees have enough apples on this year to show that they are true to name. I have planted many trees in my time—enough to know that tree planting is a gambler's game. I have been fooled so often that it is a great relief to go out and find that a tree is not sailing under false colors. We have 100 Stayman trees and if they had turned out as another hundred planted twenty years ago did, it would have been a sad blow. The time comes in the life of a man when it is too late to correct the errors or dishonesty of a nurseryman.

MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

PENNSYLVANIA FARMER
Published Weekly
Established 1877
Consolidated with
PENNSYLVANIA STOCKMAN and FARMER
Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of March 3, 1879.

New York - 420 Lexington Ave.
Chicago - 203 No. Wabash Ave.
Detroit - 1632 W. Lafayette Blvd.
Philadelphia - 1201 Chestnut St.
Cleveland - 1011 Rockwell Ave.

President - Arthur Capper
Vice-President - T. D. Harman
Editor-in-Chief - George M. Slocum
Manager - E. S. Bayard
Neff Laing

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., September 27, 1930

No. 13

Sundry Observations in Valparaiso

By E. S. BAYARD

MAYBE we'd better get along to Chile, the country for which we started. It's a long narrow land, 2700 miles or more north and south with an average width of less than 100 miles. The northern part of the country is rainless—and no rain is wanted there because that region's main source of wealth is in its nitrate ores, which would disappear if subjected to water. The central part gets rain mainly in winter and depends largely on irrigation for its crops. The southern part but not the extreme southern is a good agricultural region with a humid climate. The farther south you go in Chile the farther north you are according to our habit of thinking of the north as cold and rainy along the Pacific coast. It's the same way down there I am told, but we didn't get there.

As we got away from the arid country trees appeared which we were told were eucalyptus, the principal but not the only tree of that region. Whatever they were they looked good to us. As we approached Valparaiso we saw a triple city before us—one part on the narrow strip of land along the sea, another on the steep hillsides and a third on the hillslopes. It is a beautiful sight in the evening, when the electric lights are glowing all around and far above the bay or harbor.

The Vale of Paradise

At Valparaiso our ship docked for the first time after leaving Christobal. At all other ports everybody went to and from the ship in launches. When a little sea is running this is a rather interesting way to come and go. Now and then somebody gets wet feet as the water rises when he is at the bottom of the ship's ladder or stairway. All the way down I watched for some of the nimble boatmen to fall overboard as they balanced themselves on various parts of their craft. But they always disappointed me—nary one got a ducking though several came near to it. When we saw the dock we thought a good-sized crowd had assembled to welcome our party of distinguished scientists. But as we drew nearer we found that most of the people had come down to welcome home a Chilean prize-fighter who had fared very well in our country, beating most of his adversaries and barely missing the championship in his class. This Chilean champion didn't travel first class and fling his money about as some successful boxers do and most of us didn't know he was on board until we witnessed his welcome. He had fought for it and we were glad he got it.

We were met by a reception committee and a battery of photographers. The English of the picture takers consists mainly of three words—"One moment, please" spoken while they press the button. The first thing I noticed after landing was that the dock didn't appear to be quite "plumb"—it wavered a bit. Several others had the same experience but nobody got land-sick and we soon got used to land again. After the photographers had snapped us we were driven to a good hotel and the next two weeks were spent in a series of receptions, banquets, excursions and visits that reached Andean heights of hospitality and good will. All this was fine from a social standpoint but it left no time for a careful study of the country, so whatever is said here must be taken as the result of passing observation and not of research.

We landed in the afternoon, and early in the even-

ing were tendered a reception by the officials of the nitrate industry. It was informal, the president Mr. Francis Jeffrey presiding. He is an Englishman by birth and came to Chile fifty-six years ago. After a half century or so in Chile he thought he would retire and go back to England to spend the rest of his life. But he didn't stay long in the land of his birth. Most of those he had known there were gone, his real friends were in Chile and he missed them. So back to Chile he went and there he will remain. I have known several men who plied for the land of their birth—until they got there, and they didn't want to stay. The refreshments were ample, both solid and liquid. But we had to leave them for another reception, this one at the Intendencia, or the palace of the Intendente or Governor. Here another cordial reception, more refreshments and interesting people. These events were similar to those at Tocopilla, Antofagasta and Iquique on the way down, and models of their kind. There were no long speeches—simply a word of welcome, with the consuls of different countries and prominent officials and citizens there to help entertain us.

The next event was a visit to the naval academy located on the heights above the harbor. I forgot to embark on this expedition and spent the rainy morning rambling around the older part of the city, the narrow strip of land along the sea. It is two blocks wide in its narrowest part, but the blocks aren't very extensive nor are the buildings very high, for the city has been destroyed by earthquakes more than once. I didn't count but I think there are few structures of more than five stories. Palms grow in the plazas which are adorned with statues of Chilean heroes and memorials of Chilean victories on land and sea. This is the business part of the city. As in all cities the more prosperous citizens live in the suburbs and work downtown.

A Chilean Milk Wagon

While rambling about the city I saw my first Chilean "milk wagon." It consists of a led horse carrying two big milk cans, one on each side, the can having a faucet at the base to draw out the milk. This sort of milk-wagon is doubtless due to the steepness of many of the streets. I was told that goats are sometimes driven about and milked

according to the demand of the customer but saw nothing of the kind. There are some streets in Valparaiso so steep that when a goat tries to go up it's a pretty even thing between said goat and the street. One sign attracted special attention—"Hayscrim"—which is merely an effort to reproduce in Spanish the sound of our word or words "ice cream." If you want to have a little quiet fun get a book from which the speaker of Spanish is supposed to learn English in twenty lessons. No matter what the book costs it will be worth it.

Light Horses and Big Oxen

Another thing that interested me there and elsewhere in Chile was a two-horse or three-horse hitch that none of our party had ever seen before. An extra horse is attached to the one-horse or two-horse rig by a single trace. This extra horse carries a saddle and may be detached and ridden, but he must help the other horse or horses by pulling when his rider becomes a driver. Of course the extra horse is pulling with side-draft all the time, but I presume he helps a little even if he does unbalance things. Oxen are used in Chile to pull heavy loads and we saw some weighty ones. I was told that the big ones were the descendants of Cotentin or Normandy cattle imported from France long ago. I could not see that they were of any particular breed. The solid wheel appears on some of the big carts. It is said that this wheel is better in the mud than a wheel with spokes. Most of the horses are small but apparently quite efficient in harness or under the saddle. Only a few heavy draft horses are seen, all apparently of Percheron blood. I saw one trio of big greys but they were big only in comparison with the other horses, as they would not weigh over 1,400 pounds apiece.

Vina del Mar (the Vineyard by the Sea) lies just north of Valparaiso (the Vale of Paradise). Vina is a charming suburb, with beautiful residences, a bathing beach, a race course, a golf course, a club and all the things that go to make up a summer resort for wealthy Chileans. At the club we were tendered a banquet by the officials of the Association of Chilean Nitrate Producers. It was to begin at nine p. m. but actually started at a little past ten. Everybody was in full dress, and that means white vest and tie, swallow tail coat, standing collar—a tuxedo or dinner coat not to be worn. I was much interested in the men I met there. Every one of them, with the sole exception of the Chinese and Japanese officials, was of the white race. I had heard of the Indian blood in the Chilean people and looked for it, but there was not the slightest evidence of it at that banquet. I sat by an officer of the Chilean army and we tried a little conversation in French, but it wasn't a great success because I couldn't remember very much of that language. Vina del Mar is a summer resort and July is mid-winter there, so not much was going on. But the palms and other vegetation didn't look like a very hard winter to us who are accustomed to snow and ice.

I attended the luncheon of the Rotary Club at Valparaiso, my guide and translator being the pastor of the Union Church, a Scotchman. The speaker was the French minister to Chile and he spoke fluently in Spanish. Seven Rotarians were at our
(Continued on page 10.)



The aged Holstein class at the Cumberland county dairy cattle show at Mt. Holly last month brought out a large number of good individuals.

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
T. D. HARMAN, Vice-President
GEORGE M. SLOCUM, Vice-President
NEFF LAING, Manager

EDITORIAL STAFF
E. S. BAYARD, Editor-in-Chief
C. L. WHITE, Editor
MILES HORST, Field Editor
Editorial Offices: PITTSBURGH, HARRISBURG, PHILADELPHIA

Contributing Editors: R. P. Keiser, Alva Agee, L. W. Lighty, W. D. Zinn,
R. U. Blasingame, J. F. Shibley, F. L. Bentley, J. G. Lipman,
S. W. Fletcher, H. C. Knandel, A. A. Borland,
R. L. Scharring-Hansen, Gilbert S. Wate,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR.
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per agate line measurement, or \$14.00 per inch each insertion.
Minimum space 5 lines. Special rates on application for livestock and classified advertising. No deceptive, immoral or swindling advertisement inserted at any price.
Member Agricultural Publishers' Association,
Audit Bureau of Circulations

Volume 103, No. 13 Established 1877

A HORNLESS BULL

A HORNLESS bull but its victim is a suffering man" is the comment of G. H. Duerr of Tarentum, Pa., in reporting a bull's attack on Conrad Horn of Natrona, Pa., September 10th. Mr. Horn was attempting to water the bull when it attacked him and put him in the hospital with several broken ribs and a punctured lung. All of which is respectfully brought to the notice of several correspondents who have claimed that dehorning is the way to make a bull safe.

OUT OF BUSINESS

THE New Jersey Department of Health announces that those guilty of repeated violations of milk regulations prescribed by the State Sanitary Code will be barred from the milk business if such action is legally possible. It may not now be possible but some day it will be, for the public is not going to tolerate those who willfully and repeatedly jeopardize the health of innocent consumers. If it is legally possible to put in prison for life chronic violators of laws against crime there should be no barrier to legislation keeping out of business chronic offenders against sanitary laws.

UNANIMOUS AWARD

AT the annual banquet of the American Country Life Association, held at Madison, Wisconsin, October 9, Dr. Stephen Moulton Babcock will receive at the hands of the donor, Senator Capper, the first award for distinguished service to American agriculture. It consists of a splendid gold medal and five thousand dollars. Dr. Babcock, now eighty-seven years old, has not merely the satisfaction of having contributed incalculable benefit to American agriculture. He has the pleasure of knowing that this recognition of his service is approved without a single dissenting opinion. The National Broadcasting system will report the two speeches incident to the event.

PREMIUM ON FINISH

WEIGHTY hogs have climbed from the bottom to the top of the market quotations. Probably they will remain at the top until another corn crop is available. The Bureau of Agricultural Economics foresees fewer hogs and lighter ones during the next twelve months, and its forecast is in line with commercial expectations. The hogs will not be fed so long as in a year of abundant corn, which means that a larger proportion than

usual will come to market before the first of the year. The Bureau wisely abstains from any price prophecy, for prices are dependent on more things than numbers and weights. Before another corn crop comes along to make fat animals we are likely to see a substantial premium for finish on all kinds.

YIELDS AND COSTS

A POTATO grower of wide reputation writes: "Why is it that so many colleges of agriculture broadcast to every city voter the idea that potatoes can be produced very cheaply, on the strength of the fact that a few growers on single acres, the best growers and the best acre of each, show low costs? The farmer cannot blame the city voter if he removes the tariff on potatoes or does anything else he can to force down food prices." Those who talk to the public about extreme yields and low costs should always make plain two things. One of them is that such yields and costs are exceptional, not representative of commercial production even by competent growers. The other is that seasons have much to do with yields and costs. We know a man who is looking for a record-breaking acre of potatoes, but he isn't likely to find one in this region. Not because the growers are incompetent but because the season was unfavorable.

THE CONSENT DECREE

IN 1920, rather than continue a fight that had lasted for years and cost vast amounts in various ways, the five big packers accepted what is known as the "consent decree," and it was duly put into effect. By this decree the five packers (now four) were enjoined from owning or holding stock in stockyards and storage companies, from using their warehouses, cars and other facilities to handle or distribute other than meat products, the so-called "unrelated" products, and from operating retail meat markets. At the time we declared this decree to be unsound and detrimental to producers of livestock and so it has proved to be, for it stands in the way of the most economical distribution of meat products. It is unfair besides, for it prevents the four victims from doing what other slaughterers, chain stores or distributors are permitted to do and are actually doing. Thus far efforts to dissolve the decree have been unsuccessful. Another effort is to be made next month. It should succeed, for there is neither sense nor justice in denying freedom of trade to any legitimate industry. The stockmen of the country are now in favor of dissolving the decree and their organizations have so voted. There is not a single sound reason for its perpetuation. In fact there was none for its existence.

GOVERNMENT SPECULATORS

SECRETARY HYDE appears to be very much excited over the revelation that the Russian government has sold short several million bushels of wheat on the Chicago market. We don't know whether it is proper or improper for a foreign government to speculate in futures on an American market. That matter may be left to authorities on international relations. What would Secretary Hyde have said if the Russian government had bought the same amount of wheat for future delivery? Our own government, through an official board of which Secretary Hyde is a member, has set the example of speculation in wheat and maybe the Russian government has merely followed our policy, choosing the other side of the market. If, as Secretary Hyde says, the Russian government cannot deliver wheat on its contracts to sell then there is only one thing it can do—buy on the open market just as many bushels as it has

sold. This in the end should balance the account in every way, including any effect on such trading on prices.

A DISTINCTION

THE International Dairy Congress will be held at Copenhagen, Denmark, July 14, 17 next year. The preliminary program which has recently appeared contains several things of interest. Among them is a list of the Danes who have charge of the different activities. This list gives the titles of the individuals as well as their names, and in numerous cases the title "Farm Owner" appears. That is the title of the President, S. Overgaard, and of twenty-four members of the general committee. It is the sole title of several of them. We don't know just what that title means in Denmark, but it appears to rank with doctors, professors, members of parliament, nobles, officials of various kinds and even editors. At any rate it is better than the title many of our farmers give themselves when they say, "only a farmer." Let us remember that there are several millions of men in this country today who would be proud if they could bear the title "Farm Owner" and take a little more pride in it themselves.

TO HELP GRAIN TRADE

OFFICIALS of the Chicago Board of Trade, the Secretary of Agriculture and the Chairman of the Federal Farm Board have recently held a series of conferences the object of which is said to be the promotion of greater activity in grain trading. This is said unofficially, however. The Secretary's statement says that the conferences "concerned the possibilities of changes in the rules of the Board of Trade and the regulations of the Department to make conditions of trading more equitable as between buyer and seller." To make conditions equitable for both of these interests has always been the purpose of the grain exchanges. If any improvements are possible they will no doubt be welcome to all concerned, and conferences on such matters is always in order. One way to help the grain market is to put as few restrictions on trading as are consistent with fairness to all interests. Freedom of trade is the greatest commercial blessing any industry can have, and it is good for all concerned in the business in any way.

TWO SPECULATIONS

ONE of the primary objects in the formation of the Canadian wheat pool was to eliminate speculation. The first declared purpose of our country's Agricultural Marketing Act is to promote the effective merchandising of agricultural commodities "by minimizing speculation." It is a rather ironic fact that each of these movements has resulted in one of the greatest speculations in the history of the grain business. The Canadian pool held many million bushels of wheat for a higher price all through the past crop year while the price declined from \$1.72 at the beginning to 88c at the end of that year. If holding for an advance is not speculation what is it? If holding for the purpose of compelling an advance is not attempting manipulation what is it? In our own country an agency created by law declared that wheat was too cheap and bought a large quantity—stated as between 60,000,000 and 100,000,000 bushels. This was bought in an endeavor to "stabilize" the market—merely another name for manipulation. This purchase of something of unknown future value is necessarily speculation and cannot properly be called anything else. Isn't it rather strange that two agencies founded largely for the purpose of preventing speculation have brought to pass two of the biggest speculations on record?

New Jersey Farm Comment

By G. W. HARRIS

THE Vineland Junior Poultry Club has entered a pen of White Leghorns in the Vineland Egg-Laying Contest which opens on October 1. Each of the 17 club members has selected the best bird from his flock to make up the contest pen. They have also picked out alternate birds in case anything happens to their first selection before the opening of the contest.

J. D. Eno, leader of the Vineland Junior Poultry Club, is housing and caring for these birds until October 1. In this way the birds will get used to each other, to contest feed and to trapping, and should get off at a good start. Mr. Eno is also helping the boys make a final selection in determining the size egg produced by each bird. Egg weight will be an important factor in the New Jersey egg-laying contests this year, for contest birds will be scored on that basis. This poultry club, located in the heart of the state's poultry industry, has been very active during its two years of organization under the leadership of Mr. Eno. Last year two members of the club were on the state junior poultry judging team which brought home from the Madison Square Garden Show the exhibition trophy in judging. This year at Trenton the club's exhibits in the State Junior Poultry Show placed second in county awards.

This Vineland Junior Poultry Club flock is probably the first pen of its kind to be entered in a New Jersey laying contest.

THE fact that the animals in the Four-H Dairy Club Show at the Garden State Fair last week were better grown, fitter and shown than in past years made it the best junior dairy show that Cumberland county has ever known. Over 50 entries were made from Cumberland, Salem and Gloucester counties.

Edna Mae Beal, Salem county, again showed the senior and grand champion Guernsey heifer, Sunny-side's Rose of Friesburg, a consistent winner throughout the state this year. Senior and grand champion Guernsey bull, Atalidine Merton, was exhibited by another Salem county club member, Lee C. Williams. Junior championship went to Frank Coles of Cumberland county with his entry, Bowwood Cumberland Boy.

The championships in the Holstein classes were evenly divided between Cumberland and Gloucester counties. Walter Davis of Gloucester county showed the purple ribbon heifer calf, for junior and grand championship. John Hurff with his heifer, Blossom Hill Trine Bell, carried off senior champion honors.

All the champion Holstein bulls were entered by Cumberland Four-H members. Junior and grand champion ribbons were won by Lyndon Davis, while Henry Reene showed the senior champion in the ring.

The number of Jersey entries was small, but the animals were outstanding individuals, well grown and fitted. Thomas Glendenning's senior yearling, Minnie Hope, was awarded the junior and grand championship, while in the bull class the entry of Max Busby, Jr., was awarded junior and grand championship without competition.

Salem county made up the champion Guernsey and Holstein show herds.

BURLINGTON county fruit growers, vegetable growers, poultrymen and dairymen brought their prize grown crops, birds and cattle to Mt. Holly last Wednesday and Thursday to make the annual county show one of outstanding quality. As in the past, the fruit, vegetable and poultry exhibits were exceptionally good, while the dairy show this year improved greatly in quality of animals and their fitting over last year's entries.

The grand champion Guernsey female in the show was entered by A. J. Gauntt. Mr. Gauntt also received honors for the best get of sire. Grand champion purple ribbon in the Guernsey bull class was awarded to John S. Pew's entry.

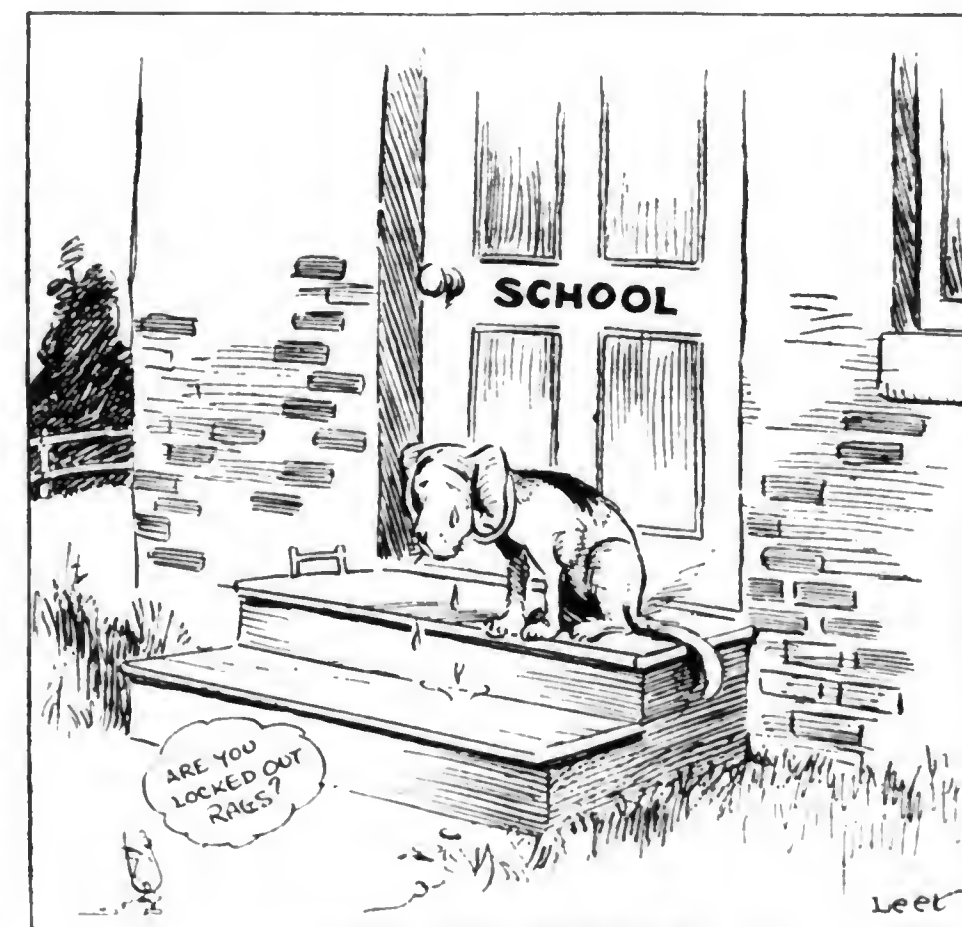
Burlington county institutions carried off most of the honors in the Holstein classes, the Borden Industrial School showing both grand champion bull and female. The best Holstein get of sire in the show was owned by the Burlington County Almshouse and the best female bred in the county was exhibited by the Masonic Home.

Heavy breeds of birds took highest honors in the poultry exhibit. Chas. Heal's entries of Jersey Black Giants took ribbons for the best hen, best pullet and best cock bird in the entire show.

The best cockerel and the best young pen were White Rocks owned by Richard Winner, and the best old pen of birds, Black Giants, were entered by Lawrence Jones.

Special prizes for the best pen of Leghorns went to Glenn Sponenbergh; best pen of White Rocks to Richard Winner; best pen of four capons to Paul E. Newell; best pen of Light Brahmas to E. J. Bunting; best tom turkey to Nelson Grovatt; and the best hen turkey to Mrs. Byron Armstrong. Rayard Tudor showed the best dozen of brown eggs and Lester Hess the best dozen of white eggs.

Preston Roberts ran up a total of 107 points with his fruit exhibits to win the sweepstakes prize in this division, while Emmor Roberts placed second with a total of 96 points. In the competitive Grange 12-box exhibit of vegetables Columbus Grange 12-box exhibit of vegetables Columbus Home took first place with a similar exhibit in competition against other county institutions.



School Days Are Here Again

Poultryman and Flock Go to College

GALE WHITSON will welcome the cackle of hens in one flock as he passes by the poultry farm at Rutgers University this winter. It will mean that another egg has been contributed toward his college expenses.

It might be said that Gale is being "egged on" through college. Last week this Sophomore poultryman from Cumberland county and 130 White Leghorns registered at Rutgers for the coming term. It will take team work between Gale and his flock if he is to get the education he desires, for these pullets are to help pay part of his college expenses this winter.

He is a veteran poultryman, having been active in Four-H Poultry Club work in Cumberland county during the past eight years. Because he knew the ups and downs of the business he decided during his Freshman year at Rutgers to bring his flock of pullets to school when he returned in the fall.

Several years ago the College anticipated the possibilities of helping ambitious young poultrymen through school, and through the cooperation of several organizations in the state built rent-free poultry houses for their use. It is in one of these buildings that Gale has housed his birds.

It has been said that Gale is a veteran poultryman. Let us look back a few years.

Eight years ago the Whitson family were farming in Roane county, Tennessee. Gale was about 12 years old then and his folks were beginning to consider his future seriously. They wanted him to have all the advantages of Four-H Club training, but as this was impossible where they were living, they moved.

"It was because of the Four-H Club work that

we came to New Jersey," Mrs. Whitson one day explained to County Agent Raymaley.

One of the first things they did after getting settled on their new Cumberland county farm was to enroll Gale in the Four-H Club. In fact, he was the first poultry club member in that county, and each year since his enthusiasm in poultry has become greater.

Up until this year Gale was a White Wyandotte breeder. If you visit the Whitson farm today you will find a flock of Wyandottes, for Mr. Whitson still favors this breed. Last year Gale bought a supposedly superior strain of Wyandottes at a fancy price and was very much dissatisfied with the results. He then decided that in 1930 he would turn to White Leghorns.

Typical of this boy's past business-like thoroughness, he immediately began a search for the best in the Leghorn breed. A special mating of 400 chicks was made possible through Elmer Wene, a hatcheryman in the county who had taken a personal interest in Gale. As a matter of fact 416 chicks were received in the shipment and over 400 of them were raised to maturity.

A loss of less than three per cent! Isn't that proof that he is already a poultryman of merit?

I asked County Agent Raymaley how he accounted for such striking success. He explained that Gale followed the latest approved poultry practices.

"In the first place he is a student of feeding practices," he said. "He buys early hatched chicks from the best strains and flocks available. Besides he follows the most rigid sanitation program. The flock is kept on clean range and the old birds and young stock are kept distinctly separate."

"As soon as possible he separates the pullets from the cockerels so that the pullets may be grown to the best advantage. And this year his pullets show the result."

Gale Whitson is not only studying the latest principles in poultry farming, but he actually practices them while in college.

A COCKEREL sale is to be held at Denton, Maryland, on September 30 under the auspices of the Caroline County Poultry Association, the Maryland State Poultry Association and the Extension Service of the State University. This sale offers an opportunity to poultrymen to obtain high quality breeding stock for their flocks at reasonable prices.

The consigned birds have been selected by poultry specialists at the University and are guaranteed, through agglutination tests, to be free from bacillary white diarrhea or pullorum disease. All Leghorn cockerels will be pedigreed from hens having a record of 200 or more eggs per year.

for at least two immediate generations and the Plymouth Rocks and Rhode Island Reds, while not pedigreed, will be from flocks that at some time have been verified and which are high producing. All birds will bear the official Maryland certification leg band.

THE "New Jersey Soil Improvement Special," carrying a trainload of information on how to improve south Jersey's greatest agricultural resource, the soil, will leave New Brunswick on October 13 for an 18-day tour through the counties of Camden, Gloucester, Cumberland, Salem, Cape May, Atlantic and Monmouth.

The need of a more extensive use of lime and cover crops in south Jersey will be emphasized by the Special, which is to be operated through a cooperative arrangement of the extension service, New Jersey Agricultural Experiment Station, the Reading Company, and the Central Railroad of New Jersey.

THEIR interest in pure-bred dairy cattle will serve to bring farmers, society women, educators and business men together on a common meeting ground at the Far Hills Fair Grounds, September 27th.

The occasion will be the second annual cattle show of the New Jersey Guernsey Breeders' Association, which will be the second largest Guernsey exhibition in the country this year, according to William M. Nulton, Jr., secretary of the association and manager of the show. He reports that entries for 155 head of pure-bred Guernseys already have been received.

"I SUPPOSE you've been wonderin' some what it is I've been buyin' up all along the road the last few days, haven't you?" Doody inquired.

"Old junk, you said," returned Shain. "Yes, but you never saw any old junk like it," said Doody. "There's more money in that kind of old junk than in any ever you saw," he went on, chuckling over a joke to which he alone held the clue.

"Money in it!" he repeated, chuckling more than ever. "Bright, jinglin' money! But it isn't every one who knows how to get that money out of the stuff I've bought. It's stuff that I've had my eye on for a long time, son. I'm not goin' to have any more secrets from you. We're in together now. How'd you like to see some of that stuff?"

"I certainly should like to see it," said Shain. Doody went to the doors and unlocked them. The dusk was deepening, and Shain, who stood at his elbow, could not see the interior very plainly.

"The particular bag that I want is pushed away down into the other end!" grumbled the old man. "You're spryer than I am, son. Won't you boost in there, like a good boy, and fetch out the sack that's tied with the clothesline? I'll stand here and scratch a match for you."

Without a word, Shain nimbly clambered up and entered the van on hands and knees. He felt queer, round protuberances and jagged points through rough fabric.

"Push right along, son!" called Doody, his voice husky. "I'll strike the match!"

The next moment both doors were slammed shut, the padlock clicked, and the young man heard the bar dropped into its slot across the entrance.

"Now, son, sit down and make yourself perfectly comfortable!" called Doody, from outside. "You're goin' to have a little ride in your own palace-car, where the night air won't hurt you."

A few moments later, while Shain was still wondering what to do in this astonishing predicament, the big wagon started. By the rocking and the banging, he understood that they had left the turnpike and were entering upon the wood road.

A few desperate kicks at the side of the van and on the doors showed him that he was safely a prisoner. So at last Shain pushed some of the sacks aside and crouched on the floor, the sharp corners of the unknown contents of the bags prodding his flesh as the swinging of the cart threw them against him.

There was no way of telling time or direction or distance in the black hole in which Shain Searway found himself. The wheels banged against rocks, the van tossed like a ship, and at times seemed to be roaring through the night at headlong speed. But the young man realized that this was illusion, created by the racket of their progress. The musty sacks about him, some of which had manifestly contained superphosphate in their days of first usefulness, made him crouch near the floor, where cracks gave him a little fresh air.

HE shouted many times at the old man, but there was no reply. Therefore, after a final outburst, in which he fully expressed his indignant opinion of old smugglers who abused decent young men, and took them away from their honest jobs to shut them up in peddlers' vans and cart them round like calves bound for market, he subsided into wrathful gloom, in which his fears wrestled with his rage.

As for Doody, he sat humped on the high seat, urging his horses along the wood road and smoking his black pipe.

"Mad's a Mellicite Injun with the toothache, and I don't blame him!" he muttered, after he had listened to an especially turbulent outburst from the depths beneath the seat. "But Lud Doody ain't goin' to be a fool twice in a fortnight. I told him more'n I had license to. The boys was right. The only thing now is to keep that bottle of information round where I can see that the cork is tight all the time."

Progress along a wood road was slow. It was broad day when Doody steered his sweating horses into a clearing that had evidently once been the center of a season's lumbering operations. It was now overgrown with tall grass and raspberry bushes that nearly hid an old log camp. This was the only structure standing. The "hovel," or horse camp, had tumbled in, and the cook camp was unroofed. The main camp was still in fair repair, and there was a curl of smoke from its funnel. Three men, who had evidently heard the clatter of the wheels against stones long before the van came in sight, were standing well out in front of the camp.

"It's Lud!" one of them ejaculated. "Where's Annis?" asked this person, when Doody had driven into the center of the clearing and stopped.

"He has stabbed himself with a piece of mine pipe," replied the old man. Although his words were jocular, his face was grim. He scowled and shook his head, as if to check his questions.

"Do you mean he's stabbed?"

The Skokums of the Allegash

By Holman F. Day

Copyright, 1907, by Perry Mason Company, Boston, Mass.

Before Doody could reply, and while he was making a warning gesture toward the van, a muffled howl came from the bowels of that vehicle.

"What is that?" asked one of the men, dropping back a little way in sudden alarm.

"It's a royal, ring-tailed tiger that I've brung in for you as a watch-dog," replied Doody. "I picked him up down here in the road a piece. And he's got ears!" he whispered, hoarsely. "Help me to take off these hosses."

The men obeyed, looking inquiry at him all the time; but he refused to open his mouth until they were behind the camp, where there was picketing ground for the animals.

"Now, first of all," said Doody, facing them, "I took Annis's place for the trip in here because I've got something to tell you that I can tell better than he can, and furthermore, I've had stuff yarded along the Daigle road for a long time that he couldn't get hold of, because he didn't know how to handle the folks. I've brought it along." He jerked his thumb toward the van.

The men nodded in eager assent. "And I wanted to tell you the straight facts about Salter's scrape."



The Cheerful Plowman

HELPING THE BEGGAR!

I NEVER see a beggar beg when seated on a box or keg without a hasty delving down to dig him up a half a crown. He may be dirty as a store on darkened streets in Baltimore; he may be cooked in alcohol or bearded like a print of Saul; he may have written on his brow the remnants of an alley row—but be that thus or be it not I ditch all philosophic thought and from my jeans I windlass up a quarter for his open cup.

Of course I know what sages say about his spree the coming day; of course I know that learned gents say men should use their common sense when moved by philanthropic hearts to give a dollar or its parts. A dry professor clothed in specs who gives advice by quarts and pecks once said to me, "You do a wrong when you support the begging throng. As long as coin goes in the cup the beggar will not bolster up."

"You think your heart is super-kind, you feel you have a sweetened mind, but think, my friend, of years to come when you are giving to a bum. Think hard about your grandson's kid, or his great-grandchild. God forbid that generations yet unborn should have their beggars all forgotten! We must not patronize the jay who asks thin dimes beside the way or we shall keep alive a breed whose sons our sons will have to feed."

Yes, thus they preach, but look! I vow I see a grimy beggar now. Today I sold my corn and beans and I have money in my jeans. Shall I slip by and pass him up, just drop some precepts in his cup? Not on your life! Hello, my man. Here go three quarters in your ear. Go buy yourself three modern shaves and keep away from dives and knaves. Go fill your stomach up with prunes, then walk erect and whistle tunes.

J. E. T.

The faces of the men grew white under tan.

"You needn't get scared yet," Doody went on, "but I ain't sayin' that you needn't feel a bit worried. When I was at Dirty Donald's Salter came polin' up-stream lickety-split, and he was blubberin' that he'd shot and killed Fightin' Flanders. Hold on! Keep still a minute! No, he hadn't killed him. He'd shot him, though, and found Fightin' John at Ubal's place, keeled up bed with a lump of lead in his leg and more or less talk in his mouth than I ever listened to before. There are three deputy marshals after Salter now more comin', so John told me. But they can catch him."

"There were some of the up-river boys at the old's to divide with me on the last opium job, and they took Salter and the jingles—and that's what you are stuttin' to find out! Yes, they took Salter and the jingles, and it was lucky they were there to take him, for all he had sense to do was to blart like a calf and pole straight ahead. The liquor and scare he was about gone to pieces."

"Did John Flanders know what Salter was doin'?" gasped one of the listeners. He turned pale. "Naw!" snorted the old man. "If he'd had the least suspicion, he'd have been out and after his leg or no leg. John thinks it was only more of the old stuff—straight smugglin'. Thinks Salter was drunk when he shot, and don't have any idea what Salter was fightin' so for. But he's a weak side boys. You can't ever send him up-river again!"

"It's fools that always have the best luck growled one. 'You know why we've sent Salter on the jobs. Deputies haven't noticed him, was one of us tryin' to get through would stir up a whole pack.'"

"I've come to the conclusion the last few weeks that I'm considerable of a fool myself," snapped Doody, "but I ain't fool enough to try any more river jobs yet a while! That shot was like loose a rock into a hornet's nest. They're buzzin' some thin lively just now. I can tell you that, gentle. He shook his head dubiously. "I don't believe any of us want the job just now. How much have you got made up?"

"Rislin' a thousand halves and about the size of quarters."

"AND as near as I could get out of that blarney Salter, it was quite a lot that he took with him."

"Seven hundred of each, and the best we have done," replied one of the three. "We put in a little more silver, and it has took that greasy feel of and helps the millin' of 'em. I tell you, that lot would fool the best of 'em." He spoke in tone of pride.

"I didn't open the parcels, for the boys got away in a hurry," said Doody, "but Salter allowed how the last jinglers was worth fightin' for. I don't approve of insertin' lead into custom inspection, but I own up it would be a shame to let the others scoop in what you and me and the others have sweat over so long."

"I'd like to see one of them loafers of inspection h'ist that stamp weight a few thousand times grumbled one, showing his calloused palms.

"Or file millin' till his fingers were most worn off," said another.

"Or frizzle himself over a meltin'-pot some of these hot nights!" grumbled the third.

"Or paddle rivers and tote round carriers alive on beans and bacon, and dicker with the nicks, and try to manage infernal fools!" added Doody. His brow knitted, and he turned toward the van, as if listening. The men had been so absorbed in his narration of Salter's troubles that they had not mentioned the mysterious captive.

"Well," said Doody, "I've got as nice a bunch of pewter from those Daigle road folks as you ever laid eyes on—and some silver."

He pointed at the van.

"Yes, I've got that plunder in the cart there and we all know how to use it, but I've got something else that I don't know so well what to do with."

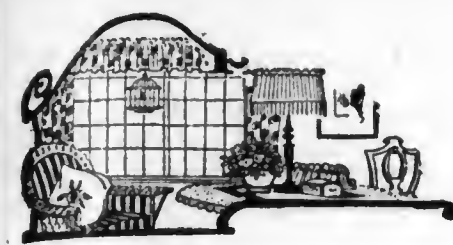
The men gathered round him, their eyes sparkling with curiosity.

"It's something that I didn't dare leave round outside, and it's something that I really didn't dare to bring along, but between the two I brought it. And now it's what to do with it."

The old man surveyed them with knotted brows as he reflected on the inconveniences of this situation. Then he briefly related his experience with Shain Searway, and with his immediate predecessor, the youth abandoned at Toban Jaws.

"It all comes of havin' to shift partners," concluded the old man, mournfully. "As long as Wal Covallis stayed alive, I never was in this kind of a mix-up. It was bow-paddle, stern-paddle, yob and a swing together with him and me, and you know it! I ought not to have tried to find another one. I was too old to do it. Here's what's come of it!" and he waved a despondent fist in the direction of the van.

(To be continued.)



A Hard Lesson

By EDITH L. REID

"MOTHER, I can't be in the pageant because I was late to practice today and missed one rehearsal last week," cried Elizabeth who had rushed into the house and now burst into tears.

"Who said so?" Mrs. Tilton inquired. "Miss Merton. She said it—was—the rule," sobbed Elizabeth.

"What made you late today?" her mother asked. "I stopped—to look—at Lucy's new tricycle, and I was riding it—and forgot—to go—to the church."

As the discussion went on, Mrs. Tilton recalled that Lucy had chosen last week to go on an all-day picnic, knowing she would miss the rehearsal. "Didn't you know about the rule for those in the pageant?" she asked.

"Yes," Lucy acknowledged, "but I thought I would only miss rehearsal; I didn't know I'd be late afterwards—but—I was!"

"And I have your costume more than half done. I was talking to Patsy's mother this morning, and we thought we would finish the costumes for you girls to-night."

"Patsy'll be in it and I won't," was Elizabeth's next thought, followed by, "Oh, Mother—do something—go and coax Miss Merton to let me be in the pageant anyway! Please do, Mother."

Mrs. Tilton looked very serious. The pageant was an important annual affair. All the lovely and specially talented little girls were to appear. She had felt proud to have her own little daughter chosen. But Elizabeth was of a careless disposition, and needed to be taught the meaning of consequences.

A Lesson Learned

"No, I don't think I shall speak to Miss Merton about this. You see, if a pageant is to be a success it takes much time and effort, and the teachers and leaders must know which girls are dependable. There must be fixed rules to govern such undertakings."

At this decision the walls broke forth anew and lasted far past supper time. Elizabeth sulked for a day or two, but her mother, true to her convictions, finished the costume and presented it to Miss Merton for the use of the little girl who was to take Elizabeth's place.

The mother knew that there was a principle involved that was wider in scope than might appear on the surface. The great and relentless law of consequences dominated the situation. Since consequences are on hand to be reckoned with in all of life's activities, the wise course was to give a lesson in results although it was temporarily not pleasant.

Several months later, when two of Elizabeth's teachers told Mrs. Tilton that Elizabeth was much more prompt to act and more considerate of rules and suggestions than she had been in the past, and inquired about the course of discipline she had been following, the mother felt that she had won a worth while victory. Yet how many parents would have had her courage? An excuse, a patched-up plausible explanation of why Elizabeth had to miss rehearsal or be tardy, would have won a pardon in the case of as influential a family as hers, but how great would have been the loss to Elizabeth!—National Kindergarten Ass'n.

Places for Wraps

A REGULAR place for wraps, over-shoes, school books, and lunch boxes will work wonders in homes where there are children of school age. Just a few simple changes

in the home may mean happier and more successful school children.

The last-minute hunt for wraps, rubbers, caps, and over-shoes is a daily cause of temper and worry in many homes, and this source of trouble can be removed by having a place for each article for each child.

A clothes closet on the first floor may be provided with plenty of hangers for coats placed low enough for the children to reach, shelves of the right size for over-shoes and hats, and drawers with partitions for gloves or mittens. Snap clothespins marked with the child's name keep pairs of rubbers together.

If there is a radiator in the closet, damp clothes may be hung on their regular hangers to dry. Linoleum on the floor makes it easy to keep the place clean. When the children are taught the habit of going directly to the wardrobe when they come into the house and putting each article of clothing in its proper place, time and tempers will no longer be lost in searching for mislaid articles.

Shelves for school books, and a definite place in the kitchen, where each child can leave his lunch box at night and find it packed ready in the morning, also help.

N. Y. State College.

Keep the small child open-minded toward new foods by introducing them in small amounts, well prepared and inviting to the eye.

Pillows Brighten the Home



THESE pillows come stamped on fine quality black all wool felt. Simply cut on lines designated on material and use a colored rayon taffeta to back up the cut out and for the back of the pillow. This material we furnish, together with the black wool felt.

No. 3361, "fuchsia" is a conventional design of exceptional beauty. For backing up the pillow and back of the pillow, silk rayon is furnished in rose only.

No. 3362, "ship". This design is the old time square rig ship under full sail. Blue rayon only for backing is furnished.

No. 3364, "hearts." This design brings to our mind cupid and his dart. Rayon in tangerine furnished.

No. 3366, "proposal." This design has all the dignity of the old-time school lady and gentleman. Rayon in orchid for backing up the design and back of pillow.

No. 3367, "peacock." This design illustrates a pert and saucy bird amid his own beauty and that of the nearby flowers. Silk rayon in green.

No. 3370, "lonesome." This design illustrates the young lady enjoying the beauties of the sun porch and gazing far afield. Blue rayon for the backing design and back of the pillow is furnished.

Price of any one pillow as illustrated, including the rayon in color designated is only \$1.00, postpaid Address Embroidery Department, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.

Care of the Ears

By R. G. BEACHLEY, M. D., Dr. P. H., and NELL C. WESTCOTT

THERE is probably no lonelier person in the world than the deaf person. If deafness comes in later life the victim generally has some recourse to things which interest him. Deafness is a tragedy at any age but to the age of childhood it shuts out even more beauty and companionship. It shuts the door to a wealth of this world's treasures that should be open to all. Teach the child to protect the ear.

This is what the U. S. Public Health Service has to say about your ears:

"The human ear is a very sensitive organ. The outer ear, the part you see, is a sort of sound collector which directs sound into the outer passage leading to the ear drum. The passage is winding and tortuous to break up the sound. Ear wax is provided by nature in the passage to catch small foreign substances, such as insects or dust, that might do harm to the delicate structure within. It is a dangerous practice to put anything in the ears or to remove wax, except that portion which may be seen. At the end of the outer passage is a tightly stretched bit of membrane called the ear drum. Behind it is another passage leading to the throat. Three tiny bones form a bridge across the passage, the middle ear, it is called, connecting the drum with the inner ear where the nerve endings from the brain terminate.

These nerves, like tiny telephone wires, carry the sound impression to the brain. Waves of sound entering the ear vibrate this drum. This moves the tiny bones and thus transmits sound. Defects in hearing are sometimes due to impacted wax in the outer ear, to running ears or an infection in the middle ear. Many of these troubles can be corrected. Measles, diphtheria, pneumonia or influenza quite often leave the hearing defective and it is very important to know this with as little delay as possible so that the ear may be treated properly before the defects become serious."

The child who appears to be inattentive or "wool-gathering" and who does not do particularly well in his class is often a victim of slight deafness. He is unjustly blamed for his inattention and his low standing in class. Have the child examined by a specialist before the matter becomes serious.

The old adage that "nothing smaller than one's elbow" should be placed in the ear is a good one to teach children.

Poached Egg Surprise

COMPANY for lunch—you want something extra appetizing and unusual, yet not hard to make, because you would rather be on the porch with your guests than in the kitchen. Try this easy recipe from the Bureau of Home Economics of the U. S. Department of Agriculture next time you encounter this problem, for all the ingredients are likely to be on hand. It's a good Sunday supper dish, too.

One pint milk, four tablespoons butter, three tablespoons flour, one-half teaspoon salt, two tablespoons fine chopped green pepper, six eggs, six large rounds toasted bread, one-half pound soft sharp-flavored cheese.

Prepare a cream sauce of the milk, butter, flour and salt, and add the green pepper. Cover the toast with thin slices of cheese. Meanwhile poach the eggs in salted water until firm, place on the cheese, and pour the hot sauce over all. Serve at once.

Equal parts of French dressing and sour cream beaten together make a pleasantly tart, thick salad dressing.

TWO HELPERS INSTEAD OF ONE IN EVERY BAR
That's why

YOU DON'T HAVE TO PAMPER FELS-NAPTHA

Wash just as you like. Fels-Naptha works excellently in tub or machine. It's fine for soaking or boiling. It does a splendid job in hot, lukewarm or even cool water. Yes indeed, any and every way you use it, Fels-Naptha gives you extra help.

With good reason, too. For Fels-Naptha isn't "just soap." It is good golden soap combined with plenty of dirt-loosening naptha. You can smell the naptha! So here are two safe, active cleaners instead of one—two cleaners that work together under all conditions, loosening stubborn dirt and washing it away without hard rubbing.

Next washday, take advantage of this extra help. See how much quicker and easier it makes your washing! How sweet and clean it gets your clothes! Notice, too, how gentle Fels-Naptha is to the hands. That's because it works

so quickly that you don't have them in water so long.

Try this extra help for household cleaning too. Get Fels-Naptha at your grocer's today—and discover this bargain in value. A bargain that brings you not more soap, but more help. Extra help that saves you!

SPECIAL OFFER—We'll be glad to send every user of laundry soap a Fels-Naptha Chipper. Many women who chip Fels-Naptha into their washing machines, tubs or basins find this chipper handier than a knife. Use it and Fels-Naptha to make fresh, golden soap chips (that contain plenty of naptha!) just as you need them. Send only a two-cent stamp to help cover postage, and we'll mail you this chipper without further cost. Write today. Dept. 7-9-27 Fels & Company, Philadelphia, Pa.

THE GOLDEN BAR WITH THE CLEAN NAPTHA ODOR

FELS-NAPTHA



HOUSE LIGHTING

Use National Carbide for house lighting. Better quality. Lower costs. Improves generator operation. Ask your dealer for National in the RED DRUM. Write us if he cannot supply you.

NATIONAL CARBIDE SALES CORP.
Lincoln Building New York, N. Y.
Coast to Coast Service

NATIONAL CARBIDE

10% CUT
FROM CATALOGUE PRICES
FOR SHORT TIME ONLY

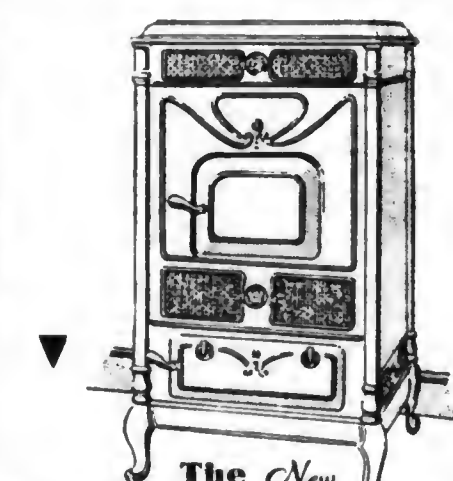
Complete for 6-Room House
WAS \$175 NOW \$157.50



INCLUDING 6 radiators, large steam boiler, pipe fittings, valves, air valves, and asbestos cement. We pay the freight.
Write for FREE Catalog 90
J. M. SEIDENBERG CO., Inc.
254 West 34th Street, New York

USE VANILLA? Then try our double-strength Non-Alcoholic Flavorite. We will send 2 quart 12-ounce bottles, postpaid for only \$1.00. A high-grade quality product absolutely guaranteed not to bake or boil out. If not entirely satisfactory we refund money. Compare the price with what you are getting and see reason. This direct from the manufacturer.
HESPELER & BEDFORD,
143 West Main Street New London, Ohio

When writing advertisers please mention Pennsylvania Farmer



The New WINOLA Parlor Heater
Combines Economical Operation and Beauty of Appearance

Now you can possess a beautiful Parlor Heater built to give long, trouble-free and economical service. The NEW Winola Parlor Heater has been praised by leading heating engineers as a stove of superior merit. Scientific arrangement of draft control, grates and heat radiation have made the Winola the choice of thousands of families. Have your local dealer explain how a stove so beautiful combines economy with its attractive appearance.

A liberal Winocraft 5-year Guarantee Bond is given with every Winola.
Winocraft Stove Works
Middletown, Pennsylvania

Cuticura Soap
World-Famous for Daily Toilet Use

Price 2c. Sample free. Address: "Cuticura," Dept. 178, Malden, Mass.

QUALITY CHICKS
J. A. Baumgardner, Beaver Springs, Pa.

Mothers Blamed

By LOUISE WHITE WATSON

SUPPLEMENTING Edgar L. Vincent's article in the August 16th issue of Pennsylvania Farmer, every line of which I heartily endorse, I wonder how many mothers realize that much of the cruelty dealt by their sons to their home animals lies at their door?

A friend of mine informed me she had ceased visiting a dear friend who lives on a most inviting farm with every modern convenience to make the work a minimum, therefore allowing time for entertainment of guests in the most pleasing manner, simply because of the unchecked cruelty exhibited by the son of the house toward the farm animals.

"One evening," she remarked, "we were all seated on the large porch in happy mood after a day's outing, when enjoyment was to the front. We were relating different incidents of the day, laughing over this and that, when Rover, a beautiful dog, attracted by our voices, stroled to the steps with tail wagging joyously. Without a word of warning, the son lifted his foot, took Rover under the jaw, and with a harsh 'Get away from here,' sent him sprawling into the yard. I was horrified! My day's outing was spoiled. And all that the mother said was, 'Run away, Rover. You annoy Son.'"

I, too, was horrified, and then my friend continued, "That was but one instance. On another occasion, the car being in demand by the father, Son was forced to use the horse and carriage much to his disgust, to convey us to a neighbor's where we were invited to spend the day."

"The horse stepped forward a pace or two before Son gave the word, and then I witnessed another almost unbelievable exhibition of temper, with an 'I'll show you what's what!' thrown in during the fracas. I turned to my friend with strong disapproval, and said, 'And you allow that?' only to be met with, 'I find it best not to interfere. It only prolongs the unpleasantness.'"

Mothers never know what the outcome of uncontrolled temper may lead to. More than one convict has been known to place the blame at his mother's door for allowing him to go unchecked when anger seized him.

Our presidents of the United States, with their love of animals, are setting a noble example to the younger generations. Mark Twain, with his kittens, Albert Payson Terhune with his Collier, Commander Byrd, presented with a much-prized medal by the Humane Society for his kind treatment of his dogs during their hard existence on the expedition to the South Pole, all give convincing evidence that brutality is severely frowned upon by the men and women who count.

Grape-Nut Raisin Pie

THREE-FOURTHS cup grape-nuts, one and one-half cups brown sugar, one-fourth cup vinegar, three tablespoons butter, one-fourth teaspoon salt, three-fourths cup chopped raisins, two and one-half cups hot water.

Combine ingredients and cook ten minutes. Cool. Pour into a pastry-lined pie plate and cover with one-half inch strips of paste around edge. Bake about 40 minutes. Addie Folsom.

Sundry Observation on Valparaiso

(Continued from page 5.)
table and they were of six countries—Chile, Scotland, France, Germany, Switzerland and the United States. The Frenchman and the German sat side by side and discussed the folly of war and the blessings of peace, and we all agreed with them. My Scotch friend told me that he has a thriving congregation made up of members of many denominations all worshipping and working together. The world does move.

School bells ring



POST TOASTIES

is the wake-up breakfast—the wake-up lunch!

Gorgeously good for little folks—and big folks, too!

So easily digested, it releases quick new energy to the body.



The Wake-up Food!

© 1930, C. F. Corp.

Poultrymen in Wales

By H. C. KNANDEL

THE party left Euston Station, London, on the 8:05, which was a special train for Leamington. While we were assigned to the wrong train by the railroad officials, nevertheless we enjoyed ourselves.

We then proceeded to the Harper Adams Agricultural College near Newport, Salop. This college offers a two-year course to students of agriculture and is the leading agricultural college in the British Isles. Excellent experimental work is in progress. The second largest egg-laying contest in the world is held at this institution. Not only are chickens trapped but ducks as well. Excellent records have been obtained and the British folks are in great favor of the institution.

We left Liverpool early on the morning of August 1st for North Wales. What a treat this was! We passed through good agricultural land, grazing areas and finally reached the mountainous district of North Wales. The road cut in between the mountains, on the sides of which sheep were grazing in great numbers, a typical scene in rural Wales.

Contest Lasts Eighteen Years

At the Llysfas Farm Institute near Ruthin we were entertained to a most bountiful luncheon. A large tent had been erected and all the 400 guests were asked to take chairs and participate in an unusual meal. After luncheon we bid adieu to generous Welsh hospitality. We passed through beautiful, mountainous country, finally coming to Llanberis. We visited Caernarvon Castle and then on to Bangor. At this place we left our buses (16 in number) and journeyed by special train to Holyhead. This town is situated at the extreme end of Wales. From there we took a special steamer for Kingstown and then a special train to Dublin.

A long train ride was taken the next day to Cork, a distance of about 185 miles. Conveyances met us at the train and whirled us to the Munster Institute where the Irish Free State government entertained us to a most elaborate luncheon. After lunch we inspected the egg-laying contest and the poultry work.

There is one thing which is most outstanding in England, Wales and Ireland in regard to the management of poultry and that is that few hens are kept to the acre and, due to the heavy rainfall, tender grass range is always available. Here in the Irish Free State was an egg-laying contest which had been in operation for 18 years and the houses never moved, yet there was an abundance of grass about those houses.

Visit Llan Mill

The buildings were so constructed that all tramping was done on the outside so that the attendant did not have to enter the house, thus preventing undue excitement to the birds and also resulting in a saving in labor.

Sunday, August 3rd, was spent a day of rest in the morning. Most of us attended church services. In the afternoon we toured through the Wicklow mountains to the farm of Mr. Robert Barton at Glendalough. From this farm about 50,000 birds are annually sold for meat purposes, the varieties being Rhode Island Reds, White Leghorns and Light Sussex. On Monday, August 4th, we left the hotel at 6:00 a. m. for Belfast, arriving at 9:10 a. m. Here some of us visited a linen mill and others the shipbuilding works. The particular linen mill which I visited employed 2,500 hands. Girls of 14 years of age were employed to operate the machines.

This trip is real work, but it is worth everything it costs. My only regret is that more of you are not along with us.
H. C. Kandel.

Are you on the tread-mill of old-fashioned washdays



TWO to SEVEN minutes in the Maytag cast-aluminum tub are equal to an hour of old-fashioned rubbing, and washday is changed to a pleasant hour or two. It is easier on the clothes and easier on you. There are no hard-to-wash clothes when you own a Maytag.

Wringing is easy also with the Maytag. The new type roller water remover extracts the water evenly from all parts of the garment, and flushes out the meshes of the clothes so that not a single speck of dirt has a chance to hide. You get vastly more for your money in a Maytag because of its finer construction and superior performance.

Powered with Electricity or Gasoline

The first self-powered washer was a Maytag, and the Maytag gasoline Multi-Motor of today is so compact that it is interchangeable with the electric motor by removing only four bolts.... starts with a step on the pedal.... has but four working parts.... a woman's engine.

A Week's Washing FREE

Get acquainted with the new Maytag washday freedom. Write or phone the nearest dealer for a Maytag. If it doesn't sell itself, don't keep it. Divided payments you'll never miss.

THE MAYTAG COMPANY
Newton, Iowa Founded 1893

Permanent Philadelphia Factory Branch.
Maytag Bldg., 621-3 North Broad St., Philadelphia, Pa.

The Maytag Aluminum Washer

3,500 S.C. WHITE LEGHORN PULLETS

4 Months Old, \$1.20 Each

A bargain in May-hatched birds. 100 pullets for \$100, f.o.b. Stockton. Send in your order immediately as these pullets will soon be gone.

PINE TREE HATCHERY and POULTRY FARMS
Box F, STOCKTON, N. J.

Navy Brand Concentrated Buttermilk

From Tuberculin Tested Cows. 28 per cent milk solids, 6 per cent lactic acid, thick as mustard with no foreign ingredients. Reduces fat-picking and lessens danger from condensation. Increases egg production and promotes fertility and hatchability. Good for chicks, broilers and laying hens. Sold direct from the factory in barrels of about 485 lbs. Half barrels, about 300 lbs.

Write for prices
TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, PA.

ENGLISH - AMERICAN WHITE LEGHORN PULLETS

\$1.25 each and up.
Free range, good value. Folder free on request.
LAUREL LOCKS FARMS, Poultry Dept., Pottstown, Pa.

SUMMER CHICKS and DUCKLINGS

of best quality. Postage paid and live arrival guaranteed. Summer and Fall chicks and ducklings are best for profitable broilers. Winter meat and spring eggs. Buy now and reap the profits. Mature breeders at right prices. 40 breeds to offer. Catalog FREE.

NABOB HATCHERIES, Box 22, GAMBIER, OHIO

ULSH'S Superior Chicks

White Wyandottes and White Rocks, \$1.00 per 100. Heavy Mixed, \$2.00-100. Heavy Mixed, \$3.00 per 100. 100% live delivery guaranteed. CHAS. F. EWING, R. 1, McClure, Pa.

Quality Chicks

White Wyandottes—all ages, A.P.A. Certified. 100% live. Large size, heavy layers. Large eggs. We have specialized in this breed for 30 years. Satisfaction free. Sherman Bowden, Box 1958, Mansfield, O.

"Write for booklet"

BOOKLETS that are offered through advertisements, usually without cost to you, stand the advertiser anywhere from ten cents to a dollar apiece. He is willing to send them to you free because he believes that you are really interested in the goods or the service he has to sell.

Read the advertisements in this paper. When booklets are offered on subjects in which you are interested, write for them, mentioning this publication. Advertised goods of known quality are safer to buy than unadvertised goods of unknown or doubtful quality. Read the advertisements.

THE YOUNG PEOPLE

A Collection of Hobbies

By OUR READERS

MY hobby, or should I say hobbies, are not of an ordinary nature. My chief hobby is composition writing. I partake in every contest, in short-story writing, essay, in fact, everything.

Of course, when one is not yet through school, one must expect disappointments. I really have my share, but I also meet with success occasionally. And when I do, it is an inspiration to push onward.

Then there is the thrill of having a composition under the eye of a critic. I have a scrap book filled with finished and partly completed stories.

While I shall never be an Edgar Allan Poe or a Hawthorne, I hope to continue my writing.

I believe that the one necessary element is "bull-dog grit" and I flatter myself in believing that I have it.

My minor hobby is pets, including a pet gander, chickens, cow and kittens. Helen Kirkheart.

West Virginia.

Mother Doesn't Approve

MY hobby is "reading"—reading most anything from advertisements to serial stories and, of course, it includes "The Young People's Page."

This is the way it goes: "Cornelia, come and dry the dishes."

"Yes, as soon as I finish this chapter."

Thirty minutes or so pass. "Cornelia, did you dry the dishes?" "Oh, I forgot, but really this book is just gorgeous."

And so on. Mother is always glad when I am through reading a book but I "ain't"—no siree! But I soon get another—don't worry.

You might call my hobby a fault but really I think it's a nice fault. But it does sort of make me cross when I am right in the heart of a "hold-up" or something and I hear a voice—"Come and dry the dishes, Cornelia" or "Time to go to bed."

And I suppose it makes Mother cross too, that I have to be in such an important part just at that particular time, but really I can't help it, can I? Cornelia B. Huntsman.

Blair county, Pa.

Collects Postage Stamps

MY pastime hobby is collecting postage stamps. I do not send away for my stamps because I think it a great deal more fun to collect them myself.

I paste my stamps in a small notebook which I divide into sections. In the first I have my U. S. stamps; in the next I have the Canadian and in the last I have the stamps from many foreign countries.

I have 75 U. S. postage stamps besides the airmail stamps of which I have 20 rectangular shaped and 15 triangular.

I have several very old U. S. stamps. Some are dated as far back as 1810. I have one celebrating the first railroad in the United States. Have 25 different Canadian stamps.

I have three French, five German, four Spanish, four from South Africa and one Chinese, making a total of 142 postage stamps which I collected myself. Roy E. Melhorn.

Pennsylvania.

Will Roy please send an address for his prize?—Editor.

From the Woods

MY favorite hobby is to collect wild flowers. I press them and then paste a bit of paper on a book and then slip the flower stem through it.

Another interesting hobby is a col-



Drawn by Melvin Detweiler

lection of butterflies. I am getting them now to make a tray. You can use a regular glass tray or an old picture frame with glass.

First I get some cardboard and cut it out the size of the tray or frame; next I get some milkweed down, lay it on the cardboard then put pressed flowers and weed on the milkweed and place the butterflies as you want. When finished, nail the tray or frame to the cardboard.

Julia Hansell.

Julia neglected to send an address.

Who Has a Better Hobby?

MAYBE you think my hobby is a queer one but I enjoy it, for it is taking care of the baby. Most of you would think it would be work but it isn't because work is washing dishes, cleaning and working.

When all that is done I love to get the baby and take him swimming in the creek. I set him in a shallow place but he isn't satisfied until he crawls in the water up around his neck and then he plays. When it is time I take him home, give him a bath, dress him in a pretty pair of rompers and curl his hair. Then I give him his supper and by that time he is usually sleepy, so I take him to his crib, cover him with his blanket and he is asleep. Not a bit of trouble and always amusing.

I wonder who has a better and more interesting hobby? Maryland. Mary Osborne.

Indian Arrow Heads

I HAVE been collecting Indian arrow heads for about five years and have about a hundred. They are all of different kinds of material. Most of them are perfect.

James E. Flahart.

Pennsylvania.

Editor's note.—Why not tell us more about your Indian arrowheads. James. The Young People would be interested.

Bugs and Butterflies

COLLECTING bugs, butterflies and millers is my hobby. I find it very interesting and pleasant and it also proves to be educational.

Last spring when school ended I started to make my collection. Everyone on the farm from baby sister to grandfather assisted me. All kinds of bugs were brought to me until I had my boxes full.

I used boxes of medium width and length and from one-half to one inch in height. I filled the bottom with paper and put a layer of hospital cotton on top. This kind of cotton is smooth and makes the boxes look attractive. Next I cut all the cardboard from the top of the lid except a small margin in which is glued a

piece of glass. I have different boxes for each type of insect.

I kill the bugs by shutting them in a tight can or dipping them in kerosene. I put them in the open air till the odor of the kerosene evaporates.

This is a very inexpensive and entertaining hobby well worth any one's time. It will help me again in the line of books as I am taking up biology in high school.

H. Lucille Glossner.

Pennsylvania.

Earned Money for Trip

CLUB WEEK at State College is over, but club girls who were there are busy telling their friends about it. If you didn't go this year, perhaps you would like to earn some money for next year. Here are some interesting ways this year's girls earned their money:

Many of them picked huckleberries and cherries on shares and sold their share. "Want to have your hair cut" was the expression of one girl. She cut the hair of all children in the neighborhood. One club contracted with the school board to clean the school houses in their district. Every member helped, then three were selected for the trip. Several clubs baked cakes, pies, doughnuts and cookies for food sales. Two girls in a canning club made jam to sell. It was good, too. Bill collecting is not any fun, yet one of our girls went from house to house so that she might have this week of real fun. Plays, pageants and ice cream socials all helped to bring in the 400 girls who were present.

Fun for Our Poets

THIS can't be Mary and her lamb with "fleece as white as snow," because this lamb is black.

Write a four-line poem explaining the picture, hurry it back, before October 4, to Little Folks' Corner, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa., and receive one of the ten prizes.

Little Folks' Corner

Timmy Twitchet Has Visitors

By RUTH PLUMLY THOMPSON

(Continued from last week.)

"Hope you'll find everything comfortable," murmured Timmy. "It's really a delightful house; just let me show you through." Chatting pleasantly, he went from room to room, all the time trying to think up some scheme in the back of his head. The dolls hadn't much to say, for Timmy's politeness quite upset them.

"Now, if you'll just wait till I pack my bag I'll show you some of the interesting spots of the neighborhood," he remarked at last. Tossing a few clothes into his grip he led the way down stairs, pointed out the handbox mountains and the spinning wheel and finally paused in front of the bird cage.



Drawn by Winifred Kohl, Penn'a.

October Activities

THE Young People's Editor has received numerous requests for new contests, so now that you are back in school and again settled at work, let's see what we can find for you to do during October.

For "Our Artists"

We have recently sent our pictures, drawn by ourselves, and now suppose we sit down and draw a picture of our homes. These aren't to be snap-shots, you know, but free-hand drawing.

Then if you aren't so keen about that subject, try your hand at a poster on "Kindness to Animals." Why not show both sides of this question?

Be sure to use black or India ink, plain unruled paper and, if possible, do not fold the drawing.

Stories for the Authors

Write an exciting unfinished story which the other readers are to finish. Do not make your story too long.

OR

Tell in less than 300 words the things you wish your father or mother wouldn't do. Prize winning stories in this contest will not bear the authors' names.

OR

Write a short poem on the subject of "Fall."

Let's All Help

All drawings, poems and stories must be sent to this office before October 25th. You may send a contribution on any or all subjects. Write plainly, give full name and address, and give your age.

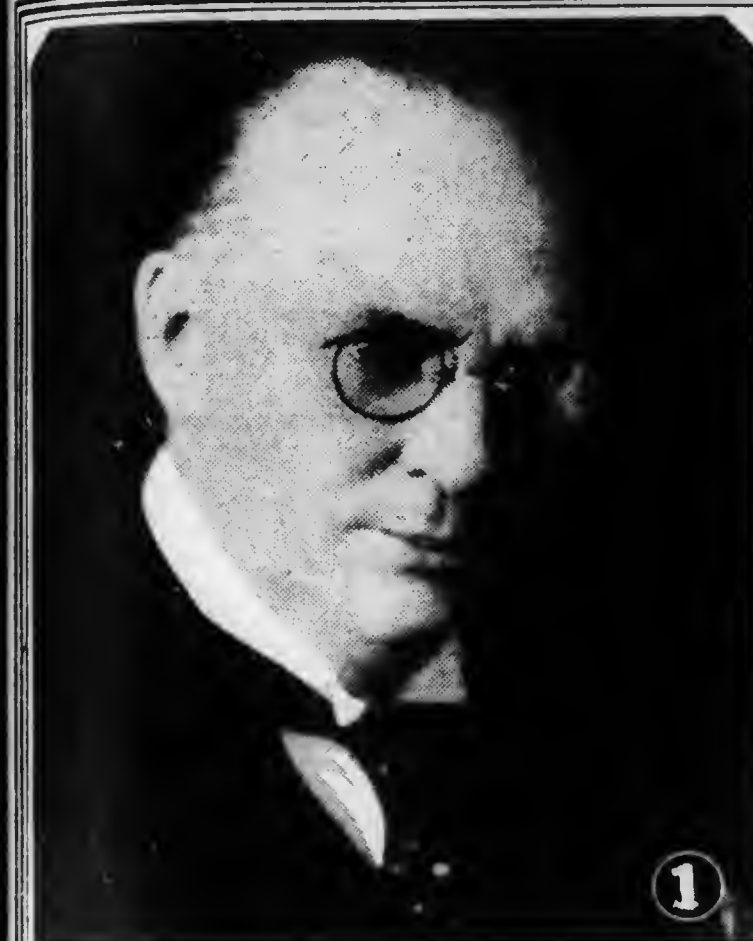
There will be worth-while prizes for all contributions published on the Young People's page. Address Young People's Editor, Pennsylvania Farmer, 7301 Penn Avenue, Pittsburgh, Pa.

PRIZE WINNERS

Coloring Old-Fashioned Girl. Mary S. Lapp, Ada Frances Wonderley, Alice Nannen, Bobby Stopes, Jessie Warren, Eva Denys, Anna Cole, Edith M. Smith.

ANSWERS TO BEHEADINGS. 1. (M)arch. 2. (F)lage. 3. (S)harp. 4. (C)rock. 5. (S)tar.

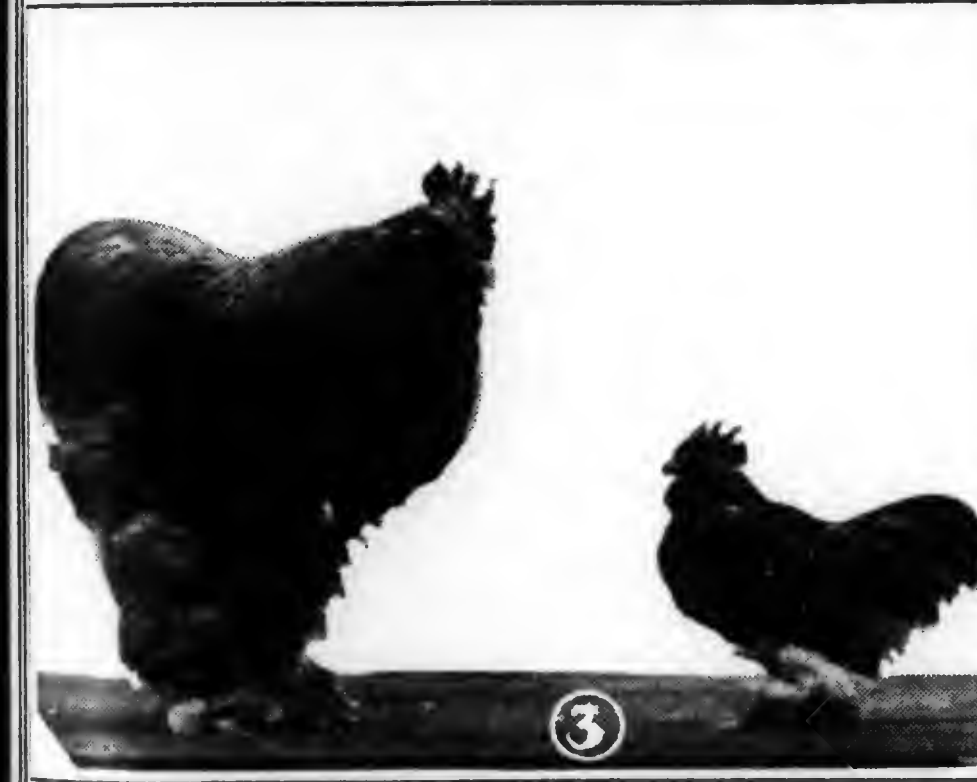
PASSING EVENTS IN PICTURES



1



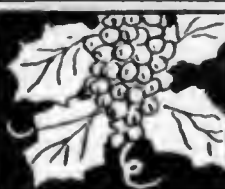
2



3



5



4



6

1. Ottawa, Canada.—Hon. R. B. Bennett, recently-elected Prime Minister of Canada, who summoned the Dominion Parliament to meet for a two-week session on September 8th. After the session he left for London, England, to attend the British Imperial Conference, which opens on September 30th.

2. Westbury, L. I.—The U. S. line-up before the first polo match with England which the Americans won, 10-5. Left to right: Eric L. Pedley, No. 1; Earle A. S. Hopping, No. 2; Thomas Hitchcock, Jr., No. 3, and W. F. C. Guest, back.

3. Trenton, N. J.—The giant and dwarf of Buff Cochins which were exhibited at the Poultry Show, held in connection with the Trenton Fair, by John C. Kriner of Stettlersville, Pa.

4. General John J. Pershing, former head of the American Expeditionary Forces, was 70 years old on September 13th.

5. San Francisco, Calif.—James Lee, national marble champion, as he arrived here aboard the S. S. Ecuador from New York to San Francisco via Colombia, S. A., Panama Canal, Costa Rica, Nicaragua, Salvador, Guatemala and Mexico.

6. New York.—Coste and Bellonte, the French trans-Atlantic flyers, with Mayor James J. Walker (left) and Grover Whalen, chairman of the reception committee, in the official car during the great parade up Broadway.

(Copyright by Underwood & Underwood.)

Farmer's Business Letter

LITTLE activity is shown in the grain markets, and of late prices have been fluctuating within a very narrow range. One day the sentiment will be reported on the weak side, and the next on the strong side, always with the hope that something will happen to develop trading interest.

The general manager of the grain stabilization corporation of the Farm Board's cooperative has stated that the corporation has no intention of unloading its holdings of 60 million bushels of wheat below cost price, either through feed, milling or export channels. He added that no arrangements have been made to grind wheat for distribution in drought-stricken areas and that they are waiting to hear from the routh-relief committee to determine what has to be done. The constant reference to this wheat that is being held under Board direction is all the evidence needed that it continues as a market factor, as it must wherever it is located until it is actually consumed.

Cattle Lower

The cattle market slumped this week, more on the plain kind than on the good kind. Best steers were no more than 50c lower, but everything else, including butcher stock, was as much as a dollar lower. Receipts were largest for any week this year, at 58,000, being near 5,000 larger than last week, second largest week of the year. Coupled with this large run as a weakening factor was a spell of warm, almost hot weather that put a crimp in consumer demand.

Top yearlings brought \$13.10, the same as last week, and 1,275-lb. cattle brought \$12.75, against \$12.60 last week for steers some heavier. About as many cattle sold at \$12.75 and last week as last. Average price this week was figured at \$10.85, 15c under last week and \$2.55 under a year ago.

Demand for stockers and feeders was quite active and trade was the largest of the year, supply being liberal and quality of offerings very good. Some fancy half-fat yearlings sold up to \$9.65, but this was an extreme quotation. Bulk of fair to good grades sold at \$6.50 to \$7.50. Something real good would cost better than \$8, and with weakness in the fat cattle market some were reluctant to pay the price.

Big Decline in Lambs

In spite of a decrease in the marketing of sheep and lambs this week, prices went way off, and the average lamb price dropped to \$7.90, which was 50c under last week and the lowest since September, 1914. At the close of the week lamb prices showed a loss of \$1.12.5. Yearlings were as much lower, but not many sheep were received and they were about steady.

Desirable feeding lambs have moved in fair volume, mostly at a range of \$7.75 to \$7.50. Some on the heavy order, as well as some light, thin ones, have had to go to packers, the latter as low as \$5. One of the largest feeders of lambs in Kansas is reported in Texas buying 100,000 lambs at 4c a pound. Some parts of Texas have been extremely dry and feed is scarce. Corn belt farmers who are accustomed to sheep seem to feel that lamb feeding is a good prospect this season.

Hogs Off, Too

It was down all the way around this week, and hogs were not an exception to the rule. The average hog price declined 25c from last week when it was \$10.25. It is now about in line with a year ago, but a little over \$2 below two years ago. Receipts were moderate, eleven markets having 373,000 against 398,000 a week ago and 432,000 a year ago. Both marketing and slaughtering continue to run well under a year ago, but there was light compared with previous years. Pork loins at wholesale have declined and are now at a range of 14¢ to 24¢, lowest since early in August.

It was one of the largest weeks on record in the futures market with 46 car-lot transactions. Prices were a little higher than last week. Light hogs sold at \$9 for December and \$9.15 for January delivery. Medium weights brought \$9.15 for December and \$9.30 for January delivery, reflecting the opinion of the trade that weight is likely to be at some premium this winter.

In Store

The report of meats in store September 1 was regarded as bullish all the way around. During August there was a reduction in all items covered in the report. Thus beef in store showed a reduction of 8 per cent, pork of 15 per cent, and of nearly 25 per cent, lamb

and mutton of 11 per cent, poultry of 9 per cent, eggs of 6 per cent and butter of 1 per cent. Totals in the case of pork and lamb are the smallest in many years, with, according to the general opinion, little prospect of any period of large accumulation ahead, in the near future.

Chicago, Sept. 20, 1930 Watson

Market Notes

LIGHT offerings of cauliflower from New York and New Jersey were seen on eastern markets last week, marking the opening of the local cauliflower season, says the New Jersey Department of Agriculture. In New York, supplies were moderate, the demand moderate and the market steady. New Jersey crates were selling for \$1.50 on the Philadelphia market.

Supplies of sweet potatoes were heavier than in the preceding week and were accompanied by slightly declining prices. On the New York market, supplies still were light, the demand poor and the market weak. New Jersey bushel hampers of U. S. No. 1 yellows were selling for \$1.50 to \$2, mostly at \$1.75 to \$1.85 at the end of the week.

Apples

New York bushel baskets of U. S. No. 1 Wealthys, two and one-half inches and up in size, were selling for \$1.25 to \$1.50 on the Philadelphia market at the end of the week, with poorer ones selling as low as \$1. Best Gravensteins of the same quality and size were selling for \$1.35 with poorer ones as low as \$1. On the New York market U. S. No. 1 Wealthys were selling for \$1.12 to \$1.25 at the close of the week.

Maine and Long Island led in the shipment of potatoes to eastern markets last week, with Pennsylvania supplying a quantity to the Philadelphia market. In Philadelphia, supplies were moderate, the demand slow and the market weak with increasing strength

toward the latter part of the week.

Prices decreased from the preceding week and at the end of the week, New Jersey 150-lb. sacks of U. S. No. 1 Cobblers were seeing street sales at \$3, with poorer ones selling at \$2.75. On the carlot market, Long Island stock was selling for \$2.25 to \$2.50 a 100-lb. sack, and Green Mountains for \$2.25 to \$2.50. On the New York market, Long Island 150-lb. sacks of U. S. No. 1 Green Mountains were selling for \$3.15 to \$3.15 and 150-lb. sacks of Long Island U. S. No. 2 Cobblers were selling for \$1.35 to \$1.50 at the end of the week.

FEED MARKETS

The following quotations are for transit and nearby shipment September 18, according to the U. S. Bureau of Agricultural Economics. They show the approximate cost of feed per ton and per bushel and grain per bushel in carlots arrival draft basis delivered on track at Philadelphia and Scranton rate points:

Brn, \$28.93; standard meal, 43c; flour middlings, \$34; cottonseed meal, 43c; per cent, \$41.50; gluten feed, \$43.25; No. 2 white oats, 49c; No. 2 yellow corn, \$1.11.

CHICAGO CASH GRAIN

Chicago, Sept. 22.—The following cash prices ruled here today: No. 1 hard wheat, \$3.46; No. 2 yellow corn, 91¢ to 91½¢; No. 2 white corn, 94½¢ to 95¢; No. 2 mixed corn, 91c; No. 2 white oats, 37½¢ to 38½¢; No. 1 Rye, 65c.

WOOL MARKET

Boston, Sept. 20.—Demand on the finer grades of domestic wools has been decidedly more active during the past week, says the U. S. Department of Agriculture, Market News Service. Topmakers and manufacturers bought more freely than for some time. Opening prices at Sydney and at London served to confirm the general belief among members of the trade that the position of fine wools is fundamentally strong.

Actual business in fleece wools was small but quotations were firm. Some business was done on strictly combing 64s and fine Ohio fleeces at 75¢ to 77c, quoted basis.

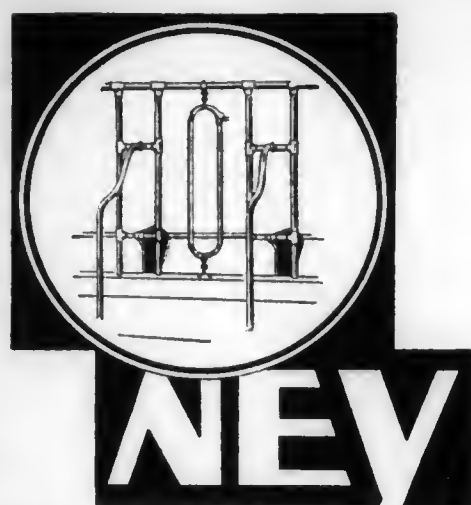
Strictly fine combing is quoted at 31¢ to 31½c in the green, half-blood, strictly combing, 30¢ to 31c, three-eighths, 30c. Half-blood clothing is quoted at 25¢ to 26c, three-eighths, 26¢ to 27c and quarter-blood, 26¢ to 27c.

Butter.—Country butter, 45¢ to 50¢; creamery butter, 46¢ to 50c.

Eggs.—Fresh, 38¢ to 42c.

Dressed poultry.—Chickens, 13¢ to 14¢; turkeys, 15¢ to 16¢; ducks, 17¢ to 18¢; geese, 19¢ to 20¢.

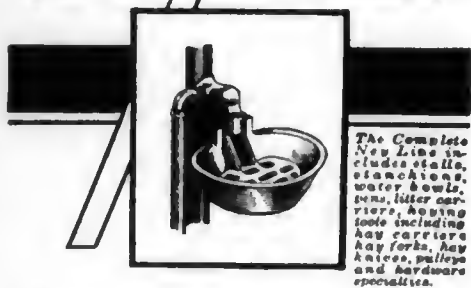
Fruits.—A P P L E S, 10¢ to 12¢; peaches, 20¢ to 25¢; plums, 10¢ to 12¢; cherries, 15¢ to 20¢; grapes, 10¢ to 12¢; berries, 10¢ to 12¢; strawberries, 10¢ to 12¢; raspberries, 10¢ to 12¢; blueberries, 10¢ to 12¢; blackberries, 10¢ to 12¢; currants, 10¢ to 12¢; figs, 10¢ to 12¢; dates, 10¢ to 12¢; pineapples, 10¢ to 12¢; melons, 10¢ to 12¢; watermelons, 10¢ to 12¢; cantaloupes, 10¢ to 12¢; cucumbers, 10¢ to 12¢; eggplants, 10¢ to 12¢; okra, 10¢ to 12¢; lima beans, 10¢ to 12¢; kidney beans, 10¢ to 12¢; pinto beans, 10¢ to 12¢; navy beans, 10¢ to 12¢; green beans, 10¢ to 12¢; peas, 10¢ to 12¢; corn, 10¢ to 12¢; sweet corn, 10¢ to 12¢; squash, 10¢ to 12¢; pumpkins, 10¢ to 12¢; turnips, 10¢ to 12¢; rutabagas, 10¢ to 12¢; kohlrabi, 10¢ to 12¢; cauliflower, 10¢ to 12¢; broccoli, 10¢ to 12¢; asparagus, 10¢ to 12¢; artichokes, 10¢ to 12¢; mushrooms, 10¢ to 12¢; onions, 10¢ to 12¢; garlic, 10¢ to 12¢; shallots, 10¢ to 12¢; leeks, 10¢ to 12¢; celery, 10¢ to 12¢; parsley, 10¢ to 12¢; dill, 10¢ to 12¢; chives, 10¢ to 12¢; basil, 10¢ to 12¢; oregano, 10¢ to 12¢; thyme, 10¢ to 12¢; sage, 10¢ to 12¢; rosemary, 10¢ to 12¢; lavender, 10¢ to 12¢; mint, 10¢ to 12¢; lemon balm, 10¢ to 12¢; catnip, 10¢ to 12¢; stevia, 10¢ to 12¢; yarrow, 10¢ to 12¢; chamomile, 10¢ to 12¢; calendula, 10¢ to 12¢; marigold, 10¢ to 12¢; zinnia, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to 12¢; ranunculus, 10¢ to 12¢; poppy, 10¢ to 12¢; pansy, 10¢ to 12¢; verbena, 10¢ to 12¢; salvia, 10¢ to 12¢; coleus, 10¢ to 12¢; begonia, 10¢ to 12¢; impatiens, 10¢ to 12¢; nicotiana, 10¢ to 12¢; petunia, 10¢ to 12¢; geranium, 10¢ to 12¢; fuchsia, 10¢ to 12¢; hibiscus, 10¢ to 12¢; gladiolus, 10¢ to 12¢; iris, 10¢ to 12¢; lily, 10¢ to 12¢; tulip, 10¢ to 12¢; daffodil, 10¢ to 12¢; crocus, 10¢ to 12¢; hyacinth, 10¢ to 12¢; narcissus, 10¢ to 12¢; anemone, 10¢ to



Increased Production Paid for Ney Equipment

TWENTY-TWO NEY STALLS, stanchions and water bowls were installed in the dairy barn on Mr. Marshall's Smicksburg, Penna. farm. In twelve months time the whole cost was returned through increased milk production alone. And Mr. Marshall had big savings in time and labor as added profit. More Ney equipment has already been ordered by Mr. Marshall. If you want full facts on the famous Ney line of Dairying Equipment and Haying Tools, send for a copy of Cow Comfort and The Ney General Catalog No. 150.

THE NEY MANUFACTURING CO.
Canton, Ohio Established 1879



BOTTLE and CAP Your Milk the Sanitary Way.

USE THE MECO AUTOMATIC BOTTLE and CAPPER.

Bottle automatically capped one second after it is filled.

Only necessary to replace the filled bottles with empties, the foot pedal automatically operates the machine.

Bottling capacity 280 to 560 qts. per hour. Designed to meet the requirements of the dairyman producing his own product, and carries the fullest approval of the Sanitary Board, being neat, compact, easy to clean and sterilize.

Write us for further details and free demonstration.

MODERN EQUIPMENT CO.,
GREENSBURG, PA.



Buy now. Pay later

A MONEY MAKER

Better feed—lower costs—more profits. Booklet "Users Own Words" written by owners proves it. Write for free copy. Write your name and check below items for illustrated folders.

The Ross Cutter & Silo Co.
240 Warder St., Springfield, O.
Established 1850

Silo ■ Stanchion ■
Cutter ■ Crib ■
Hay House ■ Brooder House ■



CONSUMERS MFG. & SUPPLY CO.
Dept. F. Moundsville, W. Va.

... IT PAYS TO READ ...

The Advertisements

Advertised products offer you known, proved quality. Answer them and say you saw the advertisement in the

PENNSYLVANIA FARMER

Dairy Rations

By L. W. LIGHTY

A LETTER from Jefferson county, W. Va., and another from Highland county, Va., are typical of a number that have come lately. "The ration we fed for several years or last year is very expensive now and hardly practical. We have oats and wheat that should be fed and very little corn. We can buy linseed meal at about the same price as formerly. We desire to feed an economical and efficient mixture including the oats and wheat." The West Virginia man has alfalfa and the Virginia man has mixed hay and some stover. Others are very short of hay and have to feed straw as part of the roughage.

It is entirely right to replace part of the corn with wheat, but when feeding dairy cows and growing heifers to become dairy cows we must use caution in feeding wheat. Experience forty years ago convinced me that too much wheat was not a good cow feed and results at experiment stations indicate the same conclusion. We have no certain data as to what proportion of wheat we may feed, but my feeding indicated that a fifth of the ration could be wheat if the rest of the feeds were well chosen.

Oats is a very excellent cow feed and the man who has plenty of oats can compound an efficient ration, and at present prices an economical ration, by using oats liberally. I would suggest the following as a good combination: 150 pounds of oats, 100 pounds of corn, 100 pounds of wheat and 150 pounds of linseed meal.

This will give us a concentrate with a ratio of one to five and a half. Wheat sometimes is laxative and so is linseed meal. It might be well if there is a looseness of the bowels to substitute 50 pounds of cottonseed meal for as much linseed meal. The man who has considerable alfalfa hay in the roughage ration need feed considerably less comparatively of this concentrate than the man who has to feed a good proportion of straw.

Soy Beans as a Dry Weather Crop

Some plants can grow with less moisture than others. The iris in my garden illustrates that. The Germanica do well on much less water than the Japanese. The Germanica bloom regardless of where I plant them, but the Japanese have to be planted where they have plenty of moisture.

This season I also learned that the soy beans grow well and yield seed with little moisture but that all other beans dried up and yielded nothing. These soys are close to my house and I had an eye on them during all their growth. They were sown the first week in June. Soon thereafter we had a half inch of rain and later a quarter of an inch and then none at all for seven weeks and often the temperature was ninety to over a hundred. The corn tassels scorched and grass turned brown, but our soys seemed to enjoy it all and kept right on growing. After the middle of August we had a few light showers, but less than half an inch of water fell.

On the first of September I went to the soy bean field and investigated. Where the soil was shallow the bean plants were 18 to 20 inches tall, while on the deeper soil they were 50 to 55 inches tall. My judgment told me the average was about three feet and the stand is good. The yield is likely to be one and one-half to nearly two tons to the acre when dried for hay. Nearly every plant has a lot of pods set ready to grow seed.

But this is not the whole story. These soys are grown in the orchard between the tree rows and the apple trees are 18 years old. These trees have fruit, but it is not full size by any means and is very plainly suffering for the want of moisture. How the beans got their supply of moisture is a mystery to me, but the growth is evidence that they got it.

QUIT WORK ON TIME WITH RAPID-FLO FILTER DISKS

Here's the fastest efficient filter disk you've ever seen—Rapid-Flo, the disk that lets you quit work on time. Rapid-Flo's average speed is less than 5 minutes to filter a 40-quart can of milk.

Be rid of delays and overtime caused by poky, old-fashioned filter disks—install Rapid-Flo today and you'll be able to filter every can you ship and quit work on time. Made of pure, long-staple cotton by Johnson & Johnson, world's largest converters of cotton for hygienic uses.

You'll like the Rapid-Flo sanitary steel cabinet, too, which keeps your disk supply protected, yet handy for instant use. Ask your dealer about Rapid-Flo Filter Disks, and the handy

Steel Disk Cabinet, shown at left. Now on sale everywhere.

Right—the Rapid-Flo carton of 300 disks.
Left—the sanitary steel disk cabinet.

FREE Send coupon below for generous free Sample Package of Rapid-Flo Filter Disks.

Johnson & Johnson
NEW BRUNSWICK, N. J.

Without obligation, send me a Free Sample Package of Rapid-Flo Filter Disks.

Name _____
Address _____
Check size of disks you use: 6" ☐ 6 1/2" ☐ 7" ☐ 7 1/2" ☐

DANZER MILK BOTTLE STERILIZER



Equipped with cover (not shown) which encloses entire top allowing sufficient space for loading and unloading bottles.

Positive Hot Water Sterilization
Pennsylvania's New Milk Law effective September 1st, requires that all bottled milk sold at retail must be in sterilized bottles.

The DANZER STERILIZER
If operated according to directions, will sterilize bottles to meet requirements of Bureau of Milk Control, Pa. Dept. of Health.

Made in Two sizes:
No. 1 Cylinder capacity, 10 rows of 5 bottles each
No. 2 Cylinder capacity, 10 rows of 3 bottles each
Ask your Dairy Supply Dealer or write for information and prices.

DANZER METAL WORKS
HAGERSTOWN, MD.

GUERNSEY SALE

Friday, October 10, 1930
12 o'clock, at

WHITE HALL FARM,
2 miles east of Waynesboro, Pa., along State Highway Route 16, easily reached by motor.

30 Guernseys—Federal Accredited
Penna. Abortion Free. Herd, Certificate No. 281.

11 Young Registered Cows, mostly fresh and springers.
4 Heifers, 8 to 15 months.
5 Bulls, 9 to 14 months.
11 Young high-grade Guernsey Cows, fresh and springers, a very good lot.

For Catalog, write,
J. HARLAN FRANTZ,
Waynesboro, Penna.



PF-4

DELLINGER Hammer Type MILLS

Priced as Low as \$110.00
F.O.B. Lancaster, Pa.



Furnished with or without Automatic Feed Rolls and Governor.

Write for catalogue
A. M. DELLINGER, Lancaster, Pa.

DAIRY CATTLE

REG. GUERNSEY BULLS, 11 and 12 years old, registered and grade heifers, 15 and 16 years old, all of the best blood, bred by McCULLOUGH FARMS, Newville, Pa.

GUERNSEY BULL, Ultra Light, bred by McCULLOUGH FARMS, Newville, Pa., May 26, 1928. Registered. Have a good wish to dispose of one. Can be seen at WILMAR FARMS.

GUERNSEY Bulls 11 and 12 years old, registered and grade heifers, 15 and 16 years old, all of the best blood, bred by McCULLOUGH FARMS, Newville, Pa.

VERY PROMISING, well grown, good blood, bred by McCULLOUGH FARMS, Newville, Pa., May 26, 1928. Registered. Have a good wish to dispose of one. Can be seen at WILMAR FARMS.

AYRSHIRE CATTLE of the best blood, bred by McCULLOUGH FARMS, Newville, Pa., May 26, 1928. Registered. Have a good wish to dispose of one. Can be seen at WILMAR FARMS.

PLEASE mention Pennsylvania Farmer when writing to our advertisers. They will thank you and we want them to know that you read it.

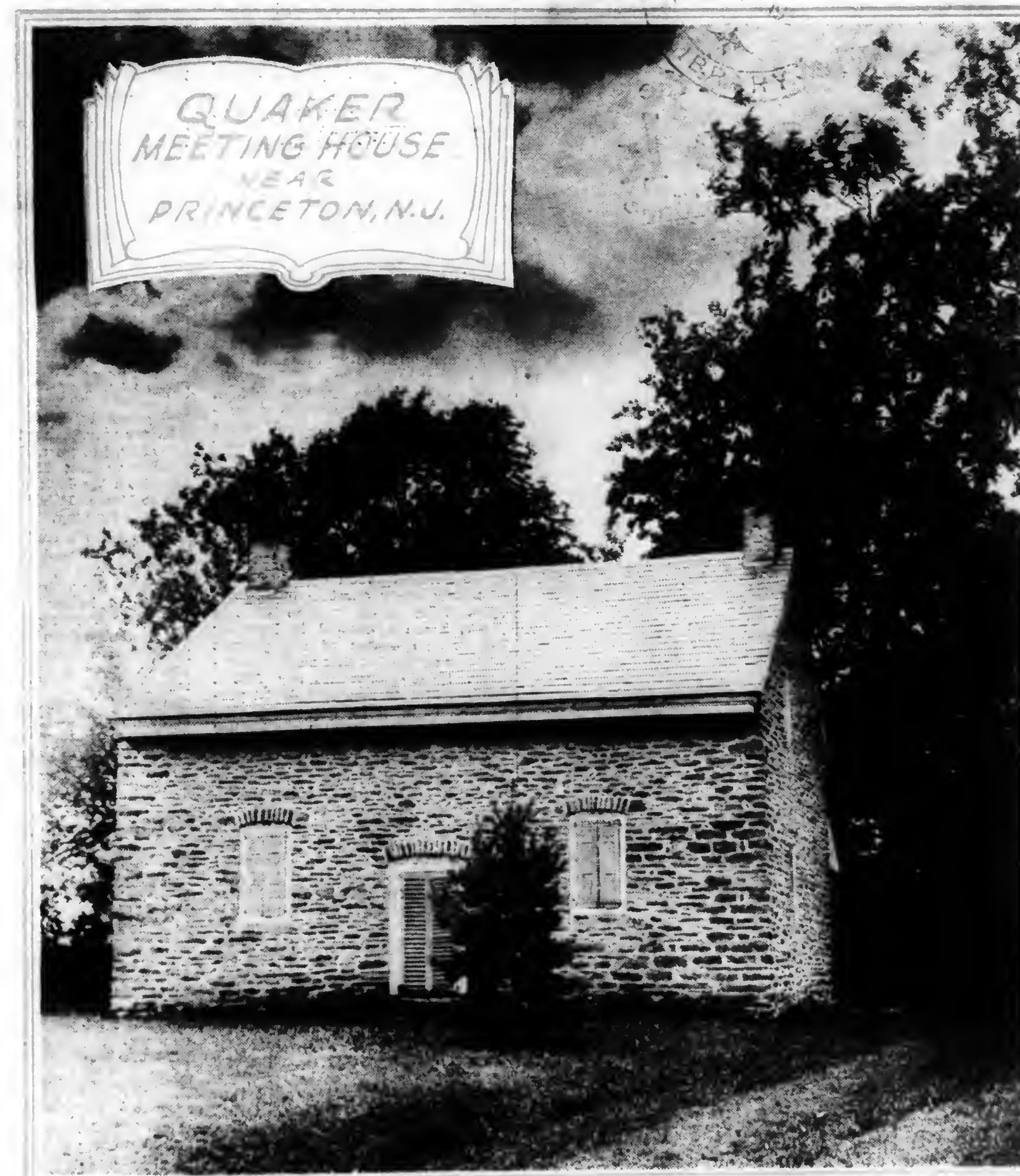
PENNSYLVANIA FARMER

Published Weekly

Established 1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

October 4, 1930



Philadelphia

Pittsburgh

Harrisburg



What about the track of the "Caterpillar" Tractor?

Why does the farmer need this track-type tractor?

To get his work done on time—to go over soft seedbeds without harmful packing—to cross soft spots without miring—to travel through dust and sand. To save power waste through slippage—to work in early or late seasons.

What does the "Caterpillar" Tractor cost?

The prices are given in this advertisement. In its cost are included designs and features that mean fuel and operating economy, ability to raise better crops.

What about the up-keep cost of the "Caterpillar" Tractor?

Amazingly low! The science of heat-treating steels to make them wear a long time is made use of throughout the "Caterpillar." Owners report long life even in extreme sand and dust conditions.

Prices—f. o. b. Peoria, Illinois
TEN . . . \$1100 TWENTY . . \$1900
FIFTEEN . \$1450 THIRTY . . \$2375
SIXTY . . . \$4175

Caterpillar Tractor Co.
PEORIA, ILL. and SAN LEANDRO, CALIF., U. S. A.

Track-type Tractors • Combines • Road Machinery
(There's a "Caterpillar" Dealer Near You)
Barnard Tractor & Equipment Co., Inc. Harrisburg
Beckwith Machinery Co. Pittsburgh
Northern Central Tr. & Equip. Co. Philadelphia
Penn. Tractor & Equipment Co. Philadelphia
Powell-Davies Tractor & Equip. Co. Wilkes-Barre
Waddingham Tractor & Equip. Co. Bradford

CATERPILLAR
TRACTOR

Farm Facts and Fancies

By ALVA AGEE

I RECKON some readers grow weary of continuing references to our national policy of bringing more of our public lands under cultivation when we now have too much. One might as well drop the subject, and I shall try to do so in the future. Our public domain is in the charge of the Department of the Interior. The Secretary made an address when he inaugurated the work at Boulder Dam which will provide water from the Colorado River for an immense acreage of desert land. The Secretary said: "Here we are in the region of little rainfall inaugurating the actual physical labor of a great project which will make water serve man by providing life for all sorts of trees, shrubs, vegetables and grain in distant valleys and plains, which will build up homes, schools and factories and which will light those homes and turn the wheels in those factories."

"Caprices of Nature"

Secretary Wilbur said: "We are determined no longer to trust to the caprices of nature, but to harness our vast river systems, to distribute power along wires and water through ditches to the places of our choice." Practically all the farmers east of the Rocky Mountains do trust, it is true, to the "caprices of nature," and in this year of drouth the output is less than usual, but it still is greater than needed. They necessarily will continue to trust the caprices of nature, and in view of the glutted markets the most of the time they see no reason for government assistance in extending acreage of farming land. The Secretary says that in turn will come other river systems, particularly the Columbia.

This is the future that we may look forward to, and the protests of eastern farmers, who bought their farms without government aid, goes for naught. The public's desert land is not needed now and may not be needed for generations, but all protest is idle and unavailing.

Business Depression

People who are rated as experts range themselves on opposing sides of nearly every question of importance. Like other readers of this paper, I am interested in knowing the various causes of our present business depression that affects everybody. Some economists say that a fundamental trouble is reduced production of gold in the world. We choose to measure values of all other products by the value of gold, and are told that when gold is not produced as freely as other products it becomes dearer, or, in other words, prices of other commodities fall.

When commodities are falling in price, people do not buy freely, expecting still lower prices, production falls off, labor is thrown out of employment and matters go from bad to worse until a low level of prices is found. All that is true enough, so far as the effect of a gold shortage is concerned, but I cannot see the evidence that we have any such shortage.

Two Outstanding Facts

It is true that the annual gold production has fallen off over ten percent in the last fifteen years, which means that less has been added to the world's stock of this metal, but this shortage is such a small fraction of the total amount in use that it cannot well account for any marked effect on prices. Much more important yet, most nations, and notably the United States, have devised ways of making the gold far more effective in the use to which we put it. The effect is the same as that of adding to the supply.

Under this country's modern method of making gold the basis of credit,

there has been no time since the Federal Reserve System was inaugurated that there was use for anything near all our supply of gold as a basis for needed credits. Most countries of the world have systems that greatly reduce the old-time demand for gold. I cannot see how our depression and low price level can be attributed to shortage in gold.

More Obvious Causes

As a plain citizen, and not an expert, I should incline to credit some obvious, every-day facts as sufficient cause for the depression that bothers us. The world became equipped to produce more wheat and oil and copper and sugar and coffee and rubber and other commodities, in which billions of dollars were invested, than the markets could handle because the amount exceeded the demand for consumption. Prices fell not because there was not gold enough, and credit enough, but simply because new aid to production gave us flooded markets. When prices broke, the public got scared, and rightly so, and cut down their purchases all along the line. Unemployment followed, and that reduced buying power.

Wanting to Criticize

If we were wise enough, this bad adjustment would not occur. I suppose, because we do know that human wants are never fully satisfied, but we do not have the wisdom and matters get tangled. Then we wait until consumption overtakes production, and prices begin to rise for that reason. The rising prices are the signal for another period of good times. We may criticize the government, or any or all groups of folks, but nobody has the combined wisdom and power to make us do things in a better way. We go headlong, take a tumble, get up and soon are going headlong again. Naturally when we are down we look around for some one to blame. It is a sort of relief to do some blaming.

If we have a continuing failure to maintain a normal annual increase in gold production, times will grow harder as the years come along, provided still better devices for using the gold we have are not found, but the obvious causes of the present depression do not appear to have much connection with any change in the supply of gold. If this is correct, we can well take heart because depression is now slowly overtaking supply in most lines of industry in this country just as has been the case many times within the memory of our oldest readers.

Second Crop of Asparagus

HAVING for years cut the top off asparagus in the late summer and burned them, I did the same late in August, burning them clean to be rid of seeds and tops. To my great surprise a second growth came up and it would be possible to have plenty of it to eat if I did not fear the results of cutting. Never before has this happened. Will it spoil the crop for next year? Should this second crop or growth be kept out down till frost or allowed to grow?

Woman Farmer

ON THE COVER

ON Washington's march, after the surprise and capture of Hessburg at Trenton, he marched toward Princeton and led his army through woodland back of the Quaker meeting house shown on our cover this week just as the British were attacking Gen. Mercer, who was mortally wounded. Washington's movement brought victory to Mercer's troops. This was the first field victory of Washington.

A GREAT NEW IDEA IN POULTRY FEED "COMPLETE IN VITAMINS"



Eggs, weight, health, fertility, all depend on these four precious Vitamins now guaranteed in Pratt's

Four vitamins are precious to poultry. Unless you know a feed contains all four, A, B, D and E, you take a chance on loss of egg production, flock vigor, body weight, health and fertile eggs.

Start your flock on Pratt's now so they can store up vitamins against the heavy laying ahead. The reason many layers suffer in body weight and vigor is simply because they lay out their vitamins faster than they take them in from the feed. In fact they would quickly die on food that lacks vitamins completely.

Here, in Pratt's Buttermilk Laying Mash, are all the vitamins A and B hens need to maintain heavy egg production, keep up body weight

and vigor. Abundant sunshine vitamin D to insure pep, strong bone and shell. You don't have to buy and mix cod-liver oil with Pratt's.

And fourth, vitamin E in sufficient quantity to eliminate sterile eggs that result from a feed deficiency.

A genuinely wonderful feed purposely made for the modern high-production flock. Pratt's has always contained the finest foods that markets provide. Animal and vegetable protein, carbohydrates, fats, in proper balance. In exact uniformity, bag to bag. All the necessary major minerals, calcium, phosphorus, iodine, salt.

And even with this extra vitamin value, Pratt's costs no more than any other good feed. See your Pratt dealer. We will be happy to send you his

name. He also supplies a splendid new Pratt's Broiler Mash for either semi-confined or battery fattening. Grows and fattens them in record time.

THE POULTRYMAN'S VITAMIN GUIDE—FREE

We think the subject of Vitamins is so timely and important to poultrymen that we have prepared for you free and postpaid a guide to the poultry vitamin story in handy chart form, each of the vitamins explained as far as science knows. Write for your copy to Pratt Food Company, 124 Walnut St., Philadelphia, Pa., Dept. 1.

Name.....

Town.....

R. F. D. State.....

PRATTS Buttermilk LAYING MASH
• COMPLETE IN VITAMINS •

The excess weight in ordinary boots makes you waste, every day, enough energy to lift a stallion weighing over a ton!



If you tried to lift this Belgian Stallion with your foot!



Men's short brown boot, knee to hip lengths

MAJOR DE MALMAISON, Grand Champion Belgian Stallion, 1929 International (After a photograph).

TWENTY-THREE hundred pounds—Major de Malmaison, Grand Champion Belgian Stallion, at the 1929 International! Suppose this prize stallion were hung from your instep. Your strength would not be equal to the strain.

And yet, every day that you wear ordinary boots which are only two ounces heavier than they should be, you lift just as much useless weight as that with your feet, and have wasted, by the end of the day, all the energy necessary to lift the stallion. And here's the proof:

Suppose, in chores around the farm, you cover $5\frac{1}{2}$ miles in a working day. (Most farmers do much more than that.) Even if you average a full yard to every step you must take 9,680 steps to do it.

If each of your boots weighs only

two ounces more than it ought to, in the course of the day you lift 2,420 pounds of unnecessary weight!

That's why Goodrich boots are made light.

It cost The B. F. Goodrich Footwear Corporation more to make them lighter and still keep them tougher, and yet it costs you no more to buy them.

Twenty-seven different compounds and fabrics go into the Goodrich boot. It is a combination created by years of laboratory study and practical experience in making footwear and automobile tires. And the same careful study and long experience have gone into the creation of every piece of footwear in the Goodrich line.

Try on a pair of Goodrich boots at your dealer's and you'll know the difference.

The B. F. Goodrich Footwear Corporation, Watertown, Mass.

Goodrich

Rubber footwear for every member of the family—another B. F. Goodrich Product



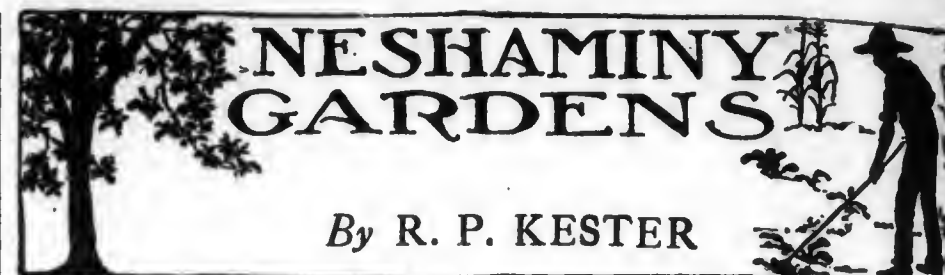
Men's 15-inch black Du Bois



Women's Zipper in swag-tan



Men's four-buckle all-rubber brown gaiter



By R. P. KESTER

I HAVE just been looking through an old file of a Bucks county paper of 1905—25 years ago. In it I see a report of a cow sale at which a carload of good milk cows sold for an average price of \$40 per head. Compared with the prices received today—\$150 to \$225—\$40 looks like a ridiculously small sum. But at that time milk was wholesaling at from $2\frac{1}{2}$ to $3\frac{1}{2}$ cents per quart, and milk feeds were from one-fourth to one-half what is paid today.

I find that most of us when thinking of "the good old days" do not look at both sides of the picture. We had pork chops for supper the other evening, the first of the season. Mrs. Kester said she paid 48 cents a pound for them. At once the occasion, twenty-five or more years ago, came to mind when we paid eight cents per pound for dressed pork. But when I stopped to think that wages and salaries at that time were correspondingly less, the picture is seen in a different light. I often think of the first year we kept a dairy and sold milk on a milk route. A miller stopped one day and sold us wheat bran at \$10 per ton. But we were hauling our milk two miles and selling it from door to door at five cents per quart.

All this fits in with my belief that experiences and conditions in life are pretty well balanced. The theory of compensation has many arguments in its favor. We may not always see it that way, but it is usually because we are looking at one phase of the situation. What we think is just, or right, or necessary may not turn out to be so at all. A poet has summed it up thus:

"Sometimes the thing our life misses, Helps more than the things which it gets."

But the longer I live the more I am convinced of the fact that, with all our ingenuity and education, we have not learned how to get the most happiness and satisfaction out of life. We have made little or no effort to study, philosophically, the art of living. Most of our days are spent in a mad scramble for things, or the money to buy them, and when we have leisure we get little from it because we do not know how.

Theoretically we should have infinitely more time to live and grow than had our grandfathers, but actually we seem to have less. The time we have saved by the adoption of machinery and scientific methods is used up in other ways to little real purpose.

Now don't think I am becoming a second edition of Ecclesiastes. I do not believe that "all is vanity and vexation of spirit." Not necessarily so. Life holds tremendous possibilities, and lots of people are finding and enjoying them. But most of us are not.

A neighbor rented a piece of ground from us this summer and sowed it to Sudan grass. Except for a light rain the night after it was sown, there was no rain for a long time. The grass had a hard time to get a start, but it has grown rapidly since rain came. The neighbor wanted to piece out his hay supply and, provided he has weather to cure it, it looks as if it would make a good lot of winter forage. I have had no experience with Sudan grass and wait with interest the outcome of this experiment.

Several years ago we sowed a piece of millet for hay. It grew very rank and made a big lot of stuff. It would

have been a big help in feeding our stock that year of insufficient hay. But the stock would not eat it. At the value we got out of it was from using it as bedding. Millet is recommended yet, but that experience makes me doubtful of its value.

The remarks concerning our home-made grape juice which I dropped here recently have resulted in a number of requests for the recipe. I have gladly passed it on, after getting Mr. Kester to check and "double check" it. Recently, I have seen a good bit of print relative to "home-made coolers" from pure unfermented fruit juices. Of course a lot of smart Alecks are poking fun at this effort of the women to provide something to take the place of the old-time alcoholic drinks. But if they persist they can and will do it.

Corn cutting, either for silo or for shock, is a mean job in this section this fall. The storm which broke the drouth knocked it down and leaned it over into a real "mess." That is one of the eventualities in the farmer's life which adds nothing but expense and trouble. (I'll admit I have difficulty in finding a compensating factor in this case.) Only a hog raiser who hogs down corn would benefit by having his corn crop put in the condition.

Friendly Talks

By Edgar L. Vincent

SOME things cannot be done by act of Congress or other mandate.

Down-town a young lady was busy rying around a corner when she ran into a little chap, thin, ragged and hungry looking. The blow almost knocked the boy down.

"I beg your pardon," the lady made haste to say. "I am so sorry I ran into you."

"You can have my pardon, miss," came back the gracious reply. "At next time you can knock me clean down and I won't mind it!"

Something warm stirred in the hearts of them both. What getting mad and storming around could have done, those few kind words had brought about.

The axes of life's machinery run dry sometimes, and that too when we least expect it. I heard a man say only the other day that the radiator of his automobile must be getting low, it got so hot. He found when he came to fill the tank that a tiny leak had caused the trouble.

It does not take much to cool us some days. Stomach a bit out of rhythm or rheumatism tells us that a storm is setting from the southeast; and we sputter and scold about things that really have no importance whatever. And then we wish we hadn't. Makes us feel a lot worse than does anybody else when we give way to one of these bad spells, and we are not happy all the rest of the day.

But if we can just remember to smile the kind word, not once in a while, but always and every time, life will be on a new meaning. The days will grow brighter for us and we will come to the day glad and ready to be down to a night free from troubled doubts and strong to take up the work of another day.

But how can we do it? Have we ever tried earnestly and wholeheartedly? That is the secret of most of our failures. We let the old Evil One get the start of us; but we do not need to.

MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

PENNSYLVANIA FARMER

Published Weekly

Established 1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of March 3, 1879

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., October 4, 1930

No. 14

On Buying Feed

By E. A. KIRKPATRICK

THERE ought to be a law against telling dairy farmers the best time of year to buy feed," a cow tester told me indignantly not long ago. What annoyed him so was conflicting advice from several different dairy authorities on the best time for laying in feed.

I've been annoyed by the same thing. I have before me as I write an article of some length from one of the state agricultural college dairy professors advising June purchases—"prices are lowest at that time." And another article from a different professor, in an adjoining state, advises the purchaser of dairy feeds to bet his money on August and September. Usually the best months, says he.

While I do not profess to be the last word on the matter, I have looked into the matter of dairy feed prices enough to convince me it is difficult to pick out a "best time" to buy the year's feed supply.

Recently I looked up the market prices by months back as far as 1925 on the feeds represented in this ration: 400 pounds wheat bran, 300 pounds wheat middlings, 200 pounds linseed meal, 100 pounds cotton seed meal, 200 pounds gluten meal, 600 pounds hominy.

I am not submitting this as an ideal ration—for the man with plenty of corn silage and good alfalfa it might be a losing proposition. This ration is good enough to be recommended by the dairy specialist at one of the foremost agricultural colleges, however.

But to get back to the market prices—I calculated the cost of one ton of this ration at prices which prevailed each month of the period designated. You'll be as surprised as I, most likely, in the story these figures tell.

In 1925 the months of low prices were March and September. There was practically no difference—only six cents a ton—in the two months. March, \$34.37; September, \$34.31. June, one of the months in which low prices were supposed to rule, was near the high then the low for the year—\$39.32, to be exact. January was high, with \$41.89. October, November and December were between \$34 and \$37.

The Next Year

Take 1926—the low month was October. A ton of this ration cost exactly \$30.81. The high month was January, \$37.57. June was \$31.26; September, \$32.59. The March price was lower than either August or September, but only slightly higher than June—\$30.95, a ton higher, to be exact.

The following year gives the price honors to the month of January—\$33.70. The trend is irregularly upward for the year, ending at \$40.82 in December. The low month was October, \$28.15. June is higher than October by 55 cents a ton. The year 1928 opens with a January price of \$32.62 and closes with a December price of \$42.65. Money bet on September would have won the year—\$38.75. August a close second, with \$38.28, for the price in that month was the lowest of the year—\$38.25. August a close second, with \$38.28, for the price in that month was the lowest of the year—\$38.25. August a close second, with \$38.28, for the price in that month was the lowest of the year—\$38.25.

1929 the January price was \$41.70 and the December price \$39.35 a ton for the ration specified.

cified. May was the low month, where it was high the year before, with price of \$35.77. June a close second with \$36.17—just 40 cents a ton more. September was within 62 cents of the high for the year, which occurred in January. September price, \$41.08 a ton. January, \$41.70. All three months following September showed considerably lower prices.

Prices for the first six months of 1930 give June the honors for buying power—the June price was a little better than \$5 below that of January. When the year is over, if you want to know about September and the following months, I'll have the figures for you.

The oft-given advice about buying dairy feeds in summer months is based on the belief that lower prices prevail at that time. It is not safe to say that such is always the case. Sometimes it is true and sometimes it isn't. It is true just often enough to make buy-in-summer advice misleading. If it were always true, we would find the manufacturers of commercial feeds buying all their supplies at that time. But they don't. Certain products entering into mixed feeds do not appear on the market all months of the year. It is the practice of all feed manufacturers to calculate the cost of their feeds every day, or every few days, on the basis of current prices. The selling price is either

saving practices which can be followed. In the first place, cash buying results in a considerable saving to the man who buys from a wideawake dealer. There are very few feed dealers left who sell on time for the same as the cash price.

There is considerable saving when several farmers pool their orders, thus enabling the dealer to order a carload; and when the feed is taken from the car door. It is wiser for several farmers to pool their orders frequently and get fresh feed than for each farmer to order individually a supply that would last him for the better portion of a year.

The matter of keeping a balance is highly important. Changing rations often causes a falling off in milk flow. Get a good ration and stick to it until thoroughly convinced there is something more profitable you can feed.

In South America

By E. S. BAYARD

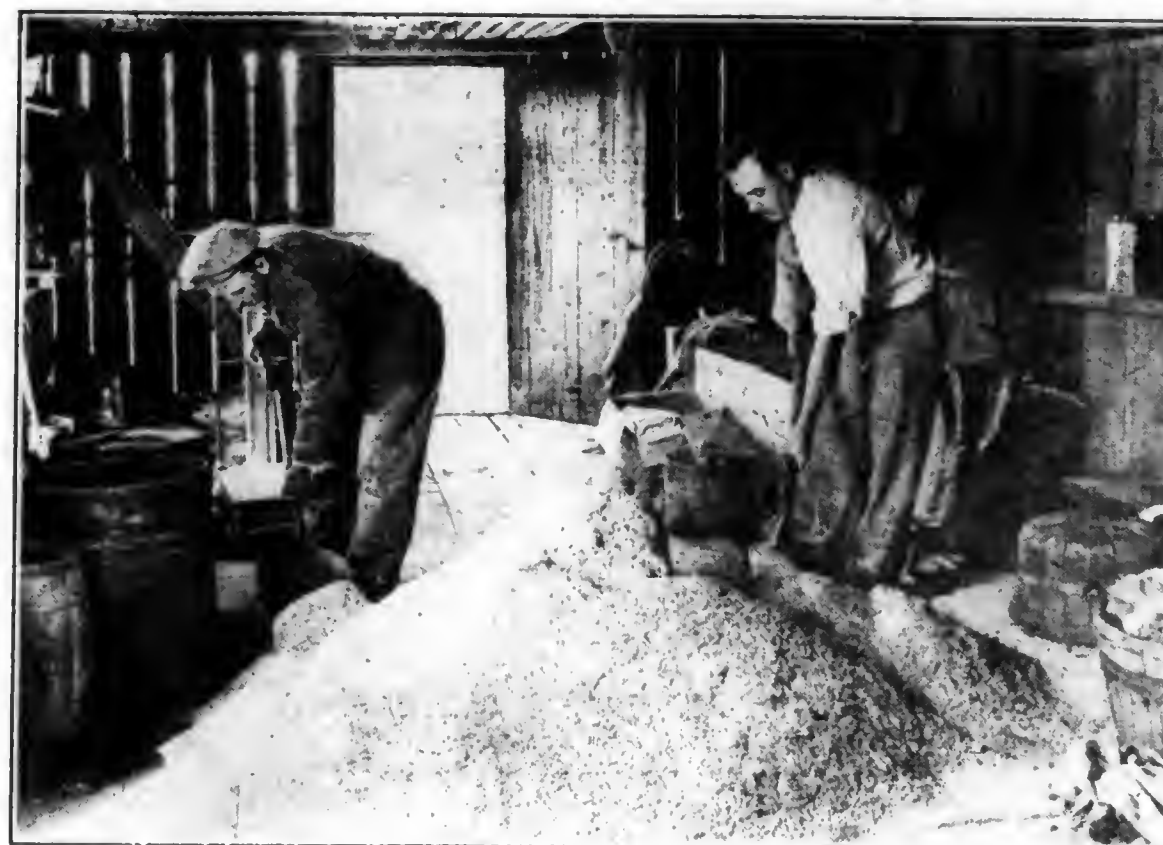
THE rain which made the roads too muddy to allow us to drive from Valparaiso to Santiago had swelled the streams, and as we went along on the railroad we saw plenty of fresh water for the first time since leaving the Panama Canal. The route to Santiago is hilly, and we cross a rather high ridge before we descend to the plain amid the mountains on which this beautiful city is located.

The tops of the high ranges were sometimes obscured by clouds along the mountain sides, but we could see the snow-clad heights much of the time. On the way over I saw many farms but only glimpses of them. The rich bottom land was largely in truck crops, though there were occasional fields of wheat. The rougher lands were in pasture and brush. A good many sheep and goats, cattle and horses were visible. The sheep were all of the medium wool class, some with black faces and some with white. A few of the cattle were reds and roans—no Herefords or Angus. No heavy horses were seen. The hogs appeared to be of Yorkshire blood—they were of that type and color. The railroad is a government institution. Our party had a whole parlor car and all were comfortable.

Many Receptions

We arrived at Santiago on Friday about noon. That afternoon we were honored with two informal receptions, one by the Minister of Agriculture and the other by the Governor. The evening was devoted to a reception and special exercises at the University of Chile. The speaking, with exception of the brief address made at each event by a member of our party, was all in Spanish and I could understand very little of it. One feature of the evening exercises was the conferring of honorary professorships in the University on four of our party. Dr. R. W. Thatcher, President of the Massachusetts Agricultural College, Amherst, Mass.; Dr. A. M. Soule, President of the Georgia State College of Agriculture, Athens, Georgia; Dr. E. C. Brooks, President of North Carolina State College, Raleigh, N. C., and our own Dr. Jacob G. Lipman.

(Continued on page 23.)



Always have enough feed on hand in winter to last over a period of bad weather. It is bad policy to change feed in the midst of a lactation period, unless the ration is deficient.

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
C. D. HARMAN, Vice-President
GEORGE M. SLOCUM, Treasurer
NELL LAMM, Manager

EDITORIAL STAFF
L. S. BAYARD, Editor-in-Chief
C. L. WHITE, Editor
M. C. GILPIN, Editor
S. W. FRIEDER, Editor
G. W. HARRIS, Editor

Advertising Office: PITTSBURGH, HARRISBURG, PHILADELPHIA
Contributing Editors: R. P. Kester, Alva Ager, L. W. Lighty, W. D. Zink,
W. V. Hunsinger, J. F. Shuler, F. L. Bentley, J. G. Lipman,
S. W. Frierich, H. C. Knabbe, A. A. Bortland,
R. L. Schilling-Hausen, Gilbert S. Watts,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR.
Canadian subscribers: Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square line (10 lines) or \$14.00 per inch each insertion. Minimum space 3 lines. Special rates on application for livestock and classified advertising. No deceptive, innuendo or misleading advertisement inserted at any price.

Member Agricultural Publishers' Association.
Audit Bureau of Circulations.

Volume 203, No. 14 Established 1877

PROSPECTS FOR FEEDERS

CATTLE and lamb feeders who are fortunate enough to have feed may get back some of the money they lost last time. For feeder cattle and lambs are selling at reasonable prices, and the shortage of corn is bound to be felt in the fat-stock market in due time. Considering everything the prospects for those who are in position to feed are better than at any time during the past ten years.

MERE SUGGESTION

WE have run across two farm loan associations which can get no further loan from the Federal Land Bank because one borrower in each association has failed to keep up his payments. Inasmuch as all loans in these two communities must be secured through the associations all farmers there are automatically shut out. There ought to be some better way of handling this business whereby the failure of one man to pay up would not prevent others from getting what they need.

BORER INSURANCE

FARMERS long for the corn borer insurance of Pennsylvania may endanger future crops by a false feeling of security this year. Apparently the slight borer damage observed has been due to unusual weather conditions. In spite of its comparative inactivity in the East this season the insect remains a menace. This good year may be followed by an unusually bad one if growers in the infested areas neglect the practices which have been so effective thus far. Destruction of the pest in its winter hiding place is still the best borer insurance.

WHY WHEAT?

AMAX who has recently traveled about and seen farmers preparing to sow wheat asks why they continue to raise it if it doesn't pay. There are several reasons why farmers in this region are seedling about their usual area of wheat but perhaps one of them is sufficient. They feel that they should not upset a proven crop rotation merely because one part of it is too cheap to be profitable. Wherever a system of agriculture has been established crop areas are slow to change and more than one year of low prices must precede a big shift.

FARM INCOMES

THE Bureau of Agricultural Economics estimates that the net income of farmers in 1929 was about \$100,000,000 greater than

in 1928. The operating costs were the same in 1929 as in 1928. Reports from 12,000 farmers indicated a net income of \$1,097 last year, but this is above the average of the country and the best in recent years. We might give many more figures as to national farm income and average farm income but what's the use? Past income should interest us less than future. What is to be our income from production in 1931? And how can we enlarge it either by improved production or by more economical operation? This is the real income problem and the past is worthless except as it shows us how to do better.

NUT RESEARCH

THE Northern Nut Growers' Association held its annual meeting at Cedar Rapids, Ia., last week. The Association reports progress in the promotion of nut culture but not rapid progress. The Michigan Experiment Station is the first in this northern region to establish experimental work in the production of nuts. It has planted thirty acres in improved varieties and will make other plantings in different parts of the state. There is a vast amount of land available for nut culture and most of that land is not now producing anything of great value. We foresee a greater demand for information about nut growing in the future and believe that our experiment stations should prepare to supply it.

TOO ENTHUSIASTIC

SOME of our advocates of wheat feeding are getting a little too enthusiastic about its value as feed, particularly for fattening animals. They cite figures to show that wheat is worth a good deal more than corn "for feeding beef cattle and hogs." If that means fattening these animals the statement is contrary to the experience of veteran feeders who have tried wheat more than once in the past. They will not believe that it is so much superior to corn, or superior at all, and their experience is worth something. Wheat is good feed when properly prepared and used. Many million bushels of it should be fed this year and will be. But there is no advantage in making extravagant statements about its feeding value.

CLEAN STATES

THREE states have qualified as accredited areas in the nation-wide campaign against bovine tuberculosis. Michigan, with almost as many dairy cattle as Pennsylvania, is the latest state to achieve this merited distinction. North Carolina was the first and Maine the second to reach the goal. Wisconsin expects soon to complete its clean-up and several other states are vying for places near the top of the accredited list. All deserve credit, as do the many counties and townships of our own territory which have finished the sometimes heartbreaking task of eradication. However, the pause to celebrate victory should not mean a let-down in the war on disease. To clean up is sometimes easier than to keep clean. Eternal vigilance is the price of healthy herds, as some careless owners of once-accredited herds have learned to their sorrow.

MORE LEGISLATION?

WHEN Congress convenes several statesmen who are more competent talkers than as thinkers will introduce bills to prohibit speculation in grain, cotton and other agricultural products. It would be useless to tell these legislators that our market would be better off right now if we had more speculation instead of less. For those who would normally speculate on the buying side are afraid of the Federal Farm Board's stocks of wheat and cotton, so we have what one

agricultural market analyst lists as a bearish factor: "Insufficient speculative buying to absorb hedging sales." And the speculative buying is not likely to be sufficient as long as these big piles of grain and cotton, with the uncertainties attending their disposition, remain in existence. What is needed now is less government interference with trading, not more of it as these statesmen propose.

OBSERVATIONS IN EUROPE

OUR friend Prof. W. A. Cochel, editor of the Weekly Kansas City Star, has been traveling in Europe for several months, studying the wheat situation there and particularly in Russia. He concludes that there is "nothing to indicate any serious decline in the price of bread grains in the large consuming countries of Europe;" also that "it is possible that a real shortage of wheat may develop there before another crop is harvested." American farmers should be interested particularly in what Prof. Cochel says about our wheat on European markets: "There are three things which have a depressing effect on values of American wheat this year. The new tariff law is resented by all European nations and results in discrimination against American products. The wheat held by the Farm Board from last year's crop is a depressing factor. Buyers hesitate to make large purchases for fear that this holdover may be placed on the market at any time with a resultant depression in prices. This tends to eliminate those who would otherwise buy and hold for an advance in prices. The third disturbing factor is the threat of large exports from Russia." As to Russia Prof. Cochel asks whether the people of that country will continue to submit to bread rationing in order to allow large exportation, but he does not attempt to answer that question further than to say that Russian export will be larger than last year.

A NEW RECORD

AS a boy we heard the greyhounds discussing the possibility of a trotting dog making a mile in 2:10. Goldsmith Maid was the champion then and 2:30 trotters were not numerous. Maud S. settled the question by trotting in 2:10 and later in 2:08 1/2, a record unsurpassed for many years. The bicycle wheel-sulky helped to lower records and the two-minute trotter became the dream of the breeder and the subject of the debates. We remember one writer who proved to his own satisfaction at least, that trotting a mile in two minutes was a physical impossibility. The public was intensely interested in the light harness horse in those days, for it supplied the roadsters for both business and pleasure. As breeding progressed and methods of training improved the light harness horse advanced toward the two-minute goal. Pacers and trotters both attained it years ago, and at the end of last year there were no less than 12 two-minute trotters, with Peter Manning 1:50 1/2 the champion. But times have changed, the light harness horse is off the road forever, and comparatively few of our people know or care what horse holds the record.

Among the faithful the love of the horse survives and the breeding of trotters goes on. Last week at Lexington the Kentucky Futurity for three-year-old trotters was won by Hanover's Bertha in 2:00, 2:01 1/4, a new record for three-year-olds. She has a right to trot fast, for her sire is Peter Volo 2:02 1/4, Peter the Great 2:07 1/4 and her dam, Mrs. Bertha Dillon 2:02 1/4, by Dillon A. 2:10 1/4. We mention all this here because she was bred in Pennsylvania, at the Hanover Shoe Farms in York county. Pennsylvania produces excellence in almost any line. Let's celebrate the fact whenever we find such an instance of it.

New Jersey Farm Comment

By G. W. HARRIS

NEW JERSEY Guernsey breeders who assembled at Far Hills last Saturday with the best animals made up the leading Guernsey cattle show in the East this year. That this show was outstanding was the opinion of all who attended. "This show was better than at the Eastern States Exposition this fall," claimed J. S. Clark, the Far Hills judge. J. S. Clark, equally well known by breeders and showmen as judge this year at the Eastern States Exposition, the Canadian National and for the past three years at the National Dairy Show, as well as former manager of Mixer Farms, was outspoken in his praise of the quality of animals in the show ring.

"Nearly all classes of males and females were outstanding in quality. Good individuals were not limited to a few in each class, but the quality was good all down the line," he said. Joseph L. Hope, veteran Guernsey breeder for nearly 50 years, was awarded the well-earned Premier Breeder trophy, an award made to the breeder of animals winning the most money in the show. Florham Farm's senior and grand champion bull, senior and grand champion cow, junior champion female and the best exhibitor's herd and young herd contributed many points toward winning this trophy. Henry W. Leeds, Locust Grove Dairies, winner of the breeder's trophy last year, was runner-up for the honor this year.

Amos and Andy, twin yearling bulls bred and exhibited by Henry W. Leeds, again made their appearance in a New Jersey show ring. They placed first and second in their class, and later Hardwick's Amos was awarded junior championship. The twins later were shown to place third for the best progeny of cow. Amos sired down to Florham Farm's senior champion, Florham Patriarch, an aged bull, for grand championship. The awarding of the senior champion ribbon in the female classes was by far the most difficult decision made by Judge Clark. Hardwick's Blossom, Locust Grove's leader in the three-year-old class, vied for honors against Florham Sonata, Florham Farm's winning two-year-old. Mr. Warren Whittier was called in the ring as associate judge before the purple ribbon was given to Joseph L. Hope's Florham Sonata. Both of these individuals were outstanding in quality and type. Hardwick's Blossom being an easy winner in an exceptionally good class of three-year-olds. The senior champion easily won the grand championship in showing with the junior champion junior yearling, Florham Merriment, bred and exhibited by J. L. Hope.

Six herds, each consisting of one bull at least two years of age, three cows in milk, and one heifer, one year and under two years, competed for exhibitor's honors. Joseph L. Hope's entry, with two grand champion animals and one junior champion included, stepped into first place. This entire herd was bred and exhibited by Mr. Hope. Henry W. Leeds' herd placed second, with that of John F. Talmadge third. In this class, contrary to most shows in the past, no calves were included in the exhibitor's herd. Florham Farms also placed first with their young herd, with John F. Talmadge in second place. Get of Mixer Hardwick, four animals shown by Henry W. Leeds, took the get of sire blue ribbon, while his progeny of Glenburnie Blossom, an aged cow and the three-year-old competitor for senior championship, placed first in the progeny class. Locust Grove Dairies was also awarded first place in a class consisting of four cows in milk.

New Jersey Guernsey breeders and William M. Sutton Jr., secretary of the state association and superintendent of the show, have made possible a state Guernsey cattle show which probably has never been equalled by any other state breeders' association. At Far Hill breeders who are never seen on the show circuit appear with animals which would credit their owners at the National Dairy Show.

PROPOSED grades for milk in New Jersey is still a matter of discussion. The Department of Agriculture has expressed its approval of the proposed grades and a hearing before the State Board of Health has been called for October 7. In the past many North Jersey milk dealers have vigorously opposed state regulations concerning quality of milk, and their influence has seriously affected the necessary cooperation from dairymen in that territory. With adjoining states raising

their standards in the production of milk, it would seem that New Jersey dairymen and dealers must soon fall into step.

THE State Board of Agriculture in New Jersey is considering taking steps to prevent cattle infected with contagious abortion from entering the state. No definite action has as yet been taken in this direction, but this problem is now under discussion. Blood testing by dairymen in New Jersey is progressing rapidly and if infected cattle can be kept out of the state it should be a valuable aid toward maintaining healthy herds.

THE bomb concerning plant quarantines which recently was burst by Secretary Duryee after a study of their costs and effectiveness in New Jersey is one that has been smoldering in several states during recent years. Few control methods through quarantines have been economically suc-



The Beginning of a Great Adventure

cessful is his claim, using the Japanese beetle quarantine as an outstanding example.

An attempt to bring about a nation-wide study of plant quarantines to result in increased economy for the states and the saving of unnecessary quarantine expenses by farmers is attracting interest outside the state. Such a move will have the united support of the farmers, for they best realize the past wastes inflicted upon agriculture by inadequate quarantines.

Such a nation-wide study of the effectiveness of quarantines, when under way, should aid in improving this situation and not result in just another investigation at Washington.

AT a recent meeting of the New Jersey State Board of Agriculture Elmer H. Wene of Vineland was re-elected president, and Joseph W. Miller of Princeton was elected vice-president. H. Norman Fogg of Hancock's Bridge took office as a member of the Board, succeeding Willard L. Hamilton of Newark.

FIRST honors for individual egg production in the Hunterdon contest went to a White Leghorn in the flock of George A. Pearce by virtue of her 285-egg score. A Pennsylvania entry ranked second with 282 eggs, after which another Leghorn owned by John Jacob Lee of Roebing, and a Rhode Island Red from the Kerr Chickeries, Frenchtown, placed third and fourth with 277 and 271 eggs. A White Leghorn owned by Joseph Joachim laid 269 eggs to place fifth, and three birds of the same breed tied for sixth rank with 266 eggs each.

New Jersey entries at Vineland could not keep with the pace set by the winning Rhode Island Red entry of Scott Poultry Farm in Massachusetts

when these birds laid a total of 2,628 eggs. They were leaders among all of the New Jersey contest flocks. One of these birds also carried off individual honors by laying 312 eggs in 51 weeks. A Barred Rock from the Pratt Experiment Station followed closely with 310 eggs.

Following Scott Poultry Farm in the order listed were entries of Broad Acres Farm (White Leghorns), Cheshire, Conn., 2,547 eggs, second; R. O. Boyve Poultry Farm (White Leghorns), Seaford, Del., 2,517 eggs, third; Ben W. Jacobs (White Leghorns), Waynesburg, Pa., 2,514 eggs, fourth; and Pinecrest Orchards (R. I. Reds), Groton, Mass., 2,483 eggs, fifth.

Edward M. Packer was the high scoring New Jersey poultryman. His Leghorns from Vineland laid a total of 2,449 eggs. The production standards in the Vineland contest this year were high, over 25 of the New Jersey entries producing over 2,000 eggs per flock.

LAST week marked the close of the three New Jersey Egg-Laying Contests, and on October 1 they were again housing a new group of pullets for another year of competition.

The last day of the Passaic contest spelled victory for a New Jersey flock of White Leghorns, owned by Quality Poultry Farm, Montville. This flock of Leghorns and a pen of Scott Poultry Farm Rhode Island Reds from Groton, Mass., were tied for first honors with 2,554 eggs each, when on the last day of the contest the Leghorns won by a margin of three eggs.

Another flock from Massachusetts placed third in total score, after which four New Jersey entries of White Leghorns followed to take fourth, fifth, sixth and seventh places. Two of them were entries of the Fox and Son Poultry Farm, Little Falls, with 2,533 and 2,514 eggs each. The Darfield Poultry Farm entry from Peapack followed with 2,487 eggs and then came the entry of Edmund L. Kelley of Paterson with 2,485.

Among the 100 competing flocks in the contest, thirty-one other New Jersey owned entries laid over 2,000 eggs each. The average production for these birds for the 51 weeks of competition was 58.5 per cent, an individual production of 209 eggs for each of the 927 competing birds.

Fox and Sons' flock in the Hunterdon county contest won with a total of 2,423 eggs, a lower record than made by their defeated pens at the Passaic contest. Two White Leghorn flocks owned by Joseph Joachim of Riverton finished in second and third places with scores of 2,389 and 2,375 eggs. George A. Pearce's entry from White House was fourth with 2,337 eggs and another Leghorn pen from Jerseyland Farm, Point Pleasant, was fifth with 2,299 eggs.

Nine more New Jersey flocks, all White Leghorns, produced more than 2,000 eggs during the contest period.

GIFTS of nearly \$25,000 to the Cook-Voorhees Soil Science Foundation of the New Jersey Agricultural Experiment Station, established to widen the scope of the institution's investigations in soil, have been announced.

Contributions of \$1,250 each were reported from Ambassador Dwight W. Morrow, Englewood; Leonard F. Loree, New York; Henry W. Jeffers, Plainsboro; Mortimer Schiff, New York; Wallace M. Scudder, Newark; Louis Marshall, New York; Charles S. Van Nuis, Franklin Park; and the following New Brunswick residents: J. W. Johnson, Henry G. Parker, Irving Hoagland, John H. Raven, and William Waldron. Another \$1,250 gift was made jointly by J. S. and R. W. Johnson.

These donations match the initial contribution received from Dr. J. G. Lipman, dean of the agricultural college, who started the foundation with the \$1,250 Chilean Nitrate of Soda Award he received in 1928 in recognition of his investigations on the relative efficiency of different nitrogenous fertilizers. The soil science foundation is named in honor of Dr. George H. Cook and Dr. E. B. Voorhees, first and second directors, respectively, of the State Agricultural Experiment Station.

It was further reported that gifts of \$1,250 each are to be made by the former and present graduate students of the college of agriculture, the New Jersey State Horticultural Society, the New Jersey State Poultry Association, the American Cranberry Association, and the New Jersey State Potato Association.

"I NEVER can start up-river again on the regular business and feel any ways right in my mind so long as that fellow is ranging in this country. And when my nerve is gone, I ain't any good. He knows my system of travelin', and he could stehoy a marshal onto me like settin' a bulldog onto a cat." The old man's tone was lugubrious.

"Let's have him out here and read the riot act to him," suggested a man who was chewing his red beard with considerable savageness. "I reckon I can straighten that chap if he ain't bent too bad."

"That's right! Let's have him out!" was the chorus. Their sullen alarm was changing to anger.

"He ain't got any right to come pokin' in here to see what he can see!" cried the red-bearded man. He spoke as if the unlucky Shain had forced his company on them, and the two others, catching this feeling, grunted out their resentment toward a man who would not stay away from where he was not wanted.

Shain was lying in his stuffy prison, his ear against a floor crack, desperately hoping to get some clue as to his probable fate. In the stillness of the forest clearing he heard the hoarse demand that he be brought out, and he stiffened his muscles and set his teeth. But instantly their voices sank again to a mumble that he could not translate. Doody was saying:

"You three need guardians more'n I do. Have him out here in broad daylight, hey, to size up the place and the men that's in it? He knows me, and that's trouble enough. Give me some grub to pass in to him, and then we'll do some fingerin' on his case."

It was Doody who appeared when the van doors were opened. His young was threatening and his tone was curt. "Young fellow, those that go huntin' for trouble up this way can have it handed out to 'em in seventeen varieties, all sharp-edged. Now I want you to shove those sacks out where I can get hold of 'em handily, and then you'll take this provender and stay in your own Pullman car till further orders—and there's no other talk to be made."

The menace in Doody's tone was too savage to permit appeal, and Shain realized it. Furthermore, cramped by his confinement and fired by the sense of his wrongs, he himself was in no mood to argue or appeal. He angrily kicked the sacks toward the opening, and the old man removed them, their contents clinking dully. Doody then set in a tin plate heaped with bread and meat, closed and locked the doors.

Then the hours did drag in earnest for Seaway. For a time there were movements to and fro outside, and mummings of voices that he heard with difficulty. Then there was no sound in the clearing except the intermittent thud of horses' feet, as they stamped to drive away the flies. The sun beat upon the flat roof of the van until Shain, with the sweat running down his face, felt as he supposed a chicken must feel, roasting in an oven and basting in its juices. The punishment was almost more than human nature could endure, and his rancor against the men who abused him thus became a rage that made him grit his teeth and crash his feet against the doors with all his failing strength.

BUT there comes a time when healthy young men must eat, and at last Shain fumbled for his tin plate, and despite his thirst, which Doody had evidently forgotten or disregarded, he managed to munch down most of the bread and meat.

As he ate, he pressed his feet against the doors, so that by springing them as far as they would go till checked by the cross-bar, he might get a glimmer of light. During the first period of his confinement he had searched his pockets over and over to find some tool, some weapon. But Doody, with far-seeing craft, had borrowed his jack-knife the day before, on pretense that he had lost his own. In Shain's vest pocket there were a few steel brads or calks such as bristle on the thick soles of river-men, but they were barely an inch long, and promised little as prison-breaking tools.

The iron bar that crossed the doors was bolted at one side, so as to revolve overhead in a half-circle and drop into a deep slot on the opposite side. The arrangement was all clear in the mind's eye of the young man. Besides this fastening there was a staple in each door, a hasp running between them, one end of the hasp secure in a staple, the other end fastened by a padlock. The bar was above the hasp a few inches.

The tin plate of the ordinary stamped sort offers as little encouragement to an imprisoned man as a river-driver's calk; but there are certain possibilities in combination which might occur to any desperate young man locked up in a sweat-box.

Shain laid the plate on the floor, pinched one of the calks between forefinger and thumb, and by the aid of a streak of light through the door crack began to crease the tin in a straight line across.

It was slow, muscle-aching work, but at last he had a strip across the center of the plate marked by parallel creases, and carefully proceeded to break the tin along these lines. This strip

The Skokums of the Allegash

By Holman F. Day

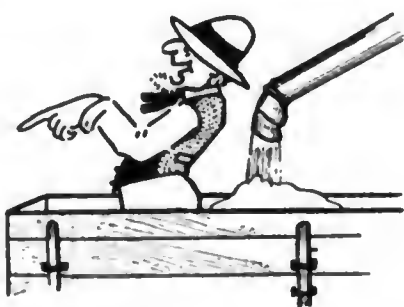
Copyright, 1907, by Perry Mason Company, Boston, Mass.

he doubled lengthwise, and with his heel stamped it flat. He then had a blade six inches long and fairly rigid.

Still there was no sound outside except the buzzing of insects and the dull stamp of horses.

By pressing outward on the doors he was able to insert the tin blade, and then cautiously lifted against the iron bar. Its end came out of the slot. He lifted it as far as the slit between the doors would allow. This released one of the doors, and holding up the bar, he endeavored to force the leaf open with shoulder and elbow. But the hasp held, and after a long struggle he had to let the bar drop back into its slot. The bar must be thrown up and over in order that he might have all his strength to apply to both doors.

He wrapped his handkerchief about the end of the strip of tin that he was clutching, and began a desperate endeavor to toss the bar with a sufficient force to throw it over. Again and again did he set his teeth, put out all his strength, bark his knuckles against the roof of the van, only to see the bar come flashing down across the strip of



The Cheerful Plowman

CUTTING OUT ARGUMENTS!

I USED to argue like a man with land to sell—a foolish plan. I had a feeling, don't you see, that every thought that dwelt in me should be imparted to the crowd in heavy language, terse and loud. When I opined that Jasper Brown should at the polls be voted down I could not keep my tongue in tow when people toasted him, you know.

"What? Vote for Brown? Now, listen men!" I shouted time and time again. "Brown's not the rooster for the roost, he's not a fellow I can boost. When Brown was picked for township clerk the lazy rascal wouldn't work; he let his wife keep all the books while he loafed 'round with drones and crooks. When he was picked for justice—say! He didn't serve a single day; his little weazened, saucy niece was really justice of the peace. I wouldn't vote for Jasper Brown were he the owner of the town; were he the last man in the vale I still would want to see him fail."

It mattered not the time or place I never kept a silent face when my most cherished views were crossed, a chance to talk was never lost. Perchance in threshing time a gent would speak a word with good intent, a word about the reason why the price was low on plums and rye, and if that word in any way was not the word I'd have him say, at once my feathers were on end and I was shouting at a friend. At once my pent-up views were loosed. I was the master of the roost.

The other fellow slipped away. He cared not for my little say; he kept the views he had before in spite of all my heated roar. I might grow purple in the face as I strewed words about the place, but he went on his humble walk all untroubled by my talk. Well, after years of shouting views to Gentiles, Hottentots and Jews, I saw the folly of it all and tied my tongue behind a wall. Now when I'm asked to state my thought I state it, but I argue not.

J. E. T.

light, and clank back into its slot. All the time he was fearing that the sound would call one of the men.

At last, in desperation that became bitter rage, he ran the risk of breaking his makeshift tool for he did not withdraw the tin when the bar came down. He caught the falling bar and threw it up again with all his strength. There was something in that flip that succeeded. The bar did not come back. Instead he heard its free end clank on the tire of the wheel.

It was as he suspected. The strength of the fastening was in the bar that was designed to control the surging of the load against the doors. The hasp and padlock were simply a precaution against curiosity, not determined thieves. And when a determined young man, lying on his back within the cart, thundered his strong shoes against the doors, the hasp bent, the staple pulled, and bang! open went prison portals, and out went the determined young man.

The moment he struck on his feet he started and ran wildly, without choosing his course, expecting that the sound of his assault on the door would bring the men from the camp.

To his surprise, he found that the dusk had settled for in his absorption in his painful task he had taken no note of time. As he ran, there was no scampering of feet behind him, no shouts of pursuit. He reached the edge of the woods and bolted into the covert like a rabbit, hurrying on without knowing or caring about his bearings or the points of the compass. He simply wanted to get away.

After running for ten minutes in the dim woods Shain Searway stopped and pondered that of all persons who had been lost in the forest, he might properly be considered the most thoroughly lost.

He had entered the clearing shut up in a black box, without the least idea of the location or direction of the wood road by which he had entered. He knew nothing of his whereabouts now.

He had just run away from that clearing without taking heed of anything except to dodge trees.

HE sat down on the little knob of a small hill that thrust its rocky summit up among the scrub-spruces, and tried to find the north star in the blinking firmament. But after he had succeeded in this, he was no better off. The lines of a patriotic poem that he once recited in school occurred to him—"No North—no South!" There was none of either just then, so far as he was concerned. That is to say, in his bewilderment one direction meant no more than another.

So he sat on his hummock a long time, and reflected on his situation. Then he decided to start somewhere, and he went blundering away across gullies and through thickets, round blow-downs and over little hills.

At last he became aware of a dull glare through the trees at his right. He felt certain that the light was not in the direction of the clearing. His first impulse was to turn and hasten away from it. But a young man thinks twice before he turns his back on a cheery glow and walks away into the deep woods in the night. Shain hesitated, advanced, retreated, advanced again, and at last, like a moth drawn out of the garden shrubbery by the lamp in a cottage window, he stealthily crept up on the mysterious red glow.

It was farther away than he had at first thought. But he finally came over a hill densely wooded, and crept down to a position where he might survey and determine if there were friends or foes. For some time, as he had held his breath and listened, he had been aware of a heavy thud, repeated at regular intervals. Now as he came in sight of a fire down in a deep valley, the sound of the thud was more pronounced. He was even able to determine the cause of it.

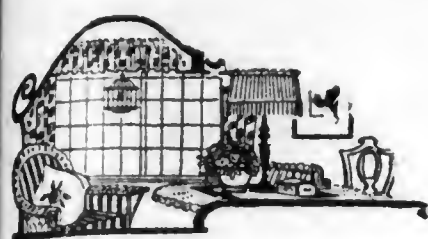
A man with a red beard, on which the firelight glimmered weirdly, was hoisting with rope and pulley a great block of wood that moved in grooves between two trees. Another man placed something on a rock between the trees, and at a word the red-bearded individual released his hold on the rope, and thump! down came the huge block.

Another man was busily stirring something in a kettle that was swung over a fire. And now Shain recognized Doody. The old man was squatting cross-legged on the ground close by the fire, and was carefully fling away at some object he held in his hand.

Shain Searway was gazing at the Skokum contentedly at their work, but he understood nothing at all of what he was beholding. It was not because he was dull of apprehension that a full half-hour went by ere he comprehended that this steady thudding block was stamping coins, that the man who tended the fire and stirred the contents of the pot was melting the metal, and that Doody was milling the edges. A sharper and more experienced man than Shain Searway would have been puzzled to understand this scene of activity in the depths of a Canadian forest.

He climbed a spruce-tree, that he might watch with greater ease and security.

(To be continued.)



What Is a Home Without Books?

WE are a family of five—father, mother, two daughters, fourteen and eleven, and a son, age five. Our home library divides itself into four general divisions: the children's library; the reference library; a small guest group; and the foundation or main collection.

Each child has his own books in his own room. This is for the purpose of developing in him a sense of ownership, a pride in good care and a love for his books born of close companionship with them. I buy only those books which will have lasting value. My bookbuying money is limited. My children read many books harmless enough in themselves, but books which will not mean anything to them when they are grown. For these books they must depend on the public library. I refuse to spend my precious money for them. I am hopeful that as the years pass the children will gradually eliminate them from their affections and cherish more fondly than ever the few real treasures which their book-shelves hold.

A Central Idea

As the children's interests shape themselves I am looking forward to the time when their libraries shall be built each around some central idea which is a vital part of its owner's life. Peggy, the eldest, has already shown some joy in the sense of possession and a desire to make her shelves the home of good books. She is collecting, one or two at a time, those girlhood treasures, the Louisa Alcott books, in that quaint old-time binding in which alone they seem genuine. "Heidi" has inspired her with a desire to own other books by Spill. The Kate Douglas Wiggin and Norah Smith edition of "The Arabian Nights" is a delightful volume with its Maxfield Parrish illustrations. "The Home Book of Verse for Young Folks" has proved a handy volume often in demand, while a Cambridge edition of Milton occupies a place of honor on her shelves. These are only a few of her treasures, but they serve to show that she is building with good material.

Of general reference books I need say little. A standard encyclopedia, a good dictionary, first-class reference and textbooks to the extent of one's means should here be included.

The guest group may be made up of a few volumes representing a diversity of tastes and interests since it is designed mainly for the guest with an unoccupied hour on his hands or the caller marooned alone. Nine or ten books may make up this group and they may include a book of essays—in light vein, and easily-read biography, a denational volume, a "best-seller" or two, a book of modern verse, and what not.

The Main Collection

Now let's consider the main group—the stuff of my dream. When I taught English in a small Massachusetts high school I began to appreciate the delight of having for one's own and in daily contact the treasures of our magnificent literature. I had started with my classes a one-hour-a-week course in the history of English literature. We were without text-books, and the course minus books and compressed into such a minimum amount of time was necessarily sketchy in the extreme. But I longed with all the intensity of a young enthusiast to give my charges some conception of the continuity and development of our literature. It was then, I believe, that I determined to collect for myself a library that would represent that development.

I care little for sets of books. As for binding I ask only that it fit the subject-matter. This is perhaps as delicate a task as fitting a person's clothes to his personality. I believe we are sometimes influenced against a book because we meet it first in incongruous garb.

I want my bookshelves filled with the finest treasures of our literature chronologically arranged. Here would be represented all the great epochs

The Farm Home



For Remembrance

By MAE SMITH

SLOWLY but surely we are coming to a saner view of what constitutes real hospitality. Why should we wear muscles to the point of exhaustion and nerves to a frazzle preparing many delicacies for expected guests? Surely our friends would not like to know that we had done so.

The wealthiest friend that I visit is delightfully informal but her after-the-Sunday-morning-service invitation is a thing for which to be grateful. It may be only "Come along and eat with me, I have but a small pudding for dessert but it will stretch."

There is always the music of rippling laughter, sparkle of wit, exquisite fellowship, sympathetic understanding.

A day in another home—three interludes, consisting of plain well-cooked food with fresh vegetables and fruit, in a program of old and new music, old and new poems, old and new anecdotes. Before the guests departed, the hostess, paraphrasing Lincoln's Gettysburg speech, said, "You will not long remember what you ate here, but we will never forget what we sang here."

As a child I used to like to carry home from a visit something by means of which I could prolong its pleasure—a scrap of my friend's new frock, a flower from her garden, a funny song—anything to mark the day.

Too Busy to Talk

Older grown I still like to "carry something home"—from a friend's house—the light of clearer perception brightening an old theme a bit of her travelog, a haunting strain of music, a line of homely philosophy to help me over a rough place—a bit of my friend to hug to my heart.

And what doth it profit either of us if she is too "busy with serving" to realize my need of herself, not her food? And will she not rejoice at my departure? If my guests carry home only the memory of "gorgeous eats," in what way is my hospitality better than that of a hotel (except for cost)?

Mae Smith

For the Hungry Man

German Roast Beef

TO one quart of water add two cups vinegar, one teaspoon salt and one-half teaspoon pepper. Add three sliced onions and two medium sized carrots grated.

Put a five-pound roast of beef in this mixture and let stand over night. In the morning put meat in roasting pan, with some of the liquor in which it was soaked and bake until tender. A half hour before it is taken from the oven cover with the onions and carrots and dot liberally with suet or beef fat. Serve on hot platter with a sauce made of the liquor in the pan, one-half cup sour cream, a seasoning of salt and pepper and flour to thicken.

Hot Potato Salad

Remove peel from eight good sized baked potatoes and cut in thin slices, add one medium sized onion sliced. Put one-third cup fat in pan, add one-third cup vinegar and heat to bubbling point. Remove to back of stove, add one cup sour cream and stir until well blended. Add the potato and onion and heat thoroughly over moderate fire. Garnish with a few celery tips just before serving.

Baked Spaghetti

Cook two cups spaghetti in salted water. Drain and pour into buttered baking dish. Fry one sliced onion in butter and add to the spaghetti. Season one pint of tomatoes with butter, salt and pepper and pour over the spaghetti. Sprinkle thickly with bread or cracker crumbs and put in oven until brown. Grated cheese may be added if desired.

L. M. Thompson

NEW USE FOR OLD IRONS

IF you have the old-fashioned flatirons, maybe rusty—just get some lacquer and paint them the color you wish and use them for book ends. They will hold a lot of heavy books in right position.

M. C. B.



"A library is not a luxury but one of the necessities of life."—Henry Ward Beecher.

will simply have to form a group by themselves called the "Miscellaneous Section."

The library grows. I shall never finish it. But I can watch it grow, have a hand in its growth, and the satisfaction of knowing that it contains the best there is.

Editor's note:—Mrs. Clarence A. G. Pease of Quakertown, Pa., was among the prize-winners in a recent Home Library Contest. We are very pleased to submit to you a part of her essay on The Home Library—how to build it and how to use it. The illustration shows the interesting scheme of book-shelf arrangement in the Pease home.

Timely Tips

EGG white applied to the face has something the same effect as complexion clay. Beat one egg white, add to it the juice of one-half lemon, and beat again. Apply to face, neck, hands and arms. Let it congeal, and leave it on about ten minutes. Wash off with cold water and rub the skin with soft linen towel. This serves as a bleach and complexion clay. It feels soothing and cooling and invigorating to the most sensitive complexion and all the dirt or accumulated grease is dislodged from the tiny pores.

Is your face very sensitive to wind and sun? A little liquid alboline or mineral oil on a dampened cloth will act as a cleansing agent, at the same time soothing the irritated skin.

The child's towel rack should be near the wash bowl and low enough for the child to reach. A chair standing near by makes a convenient place for Mother to sit while she washes Biddy's hands and face. Such small conveniences give Mother a rest opportunity, when she would otherwise be stooping, one of the most tiring positions.

M. C. B.

Forget Good Luck 

 Forget Bad Luck

"balance"

is worth more than
any kind of luck!

Good luck is dangerous—it will desert you when you need it most. Bad luck is always bad. Forget any kind of luck in baking—place your trust in "balance." A "balanced" recipe is one that calls for just the right amount of every ingredient. The "balanced" flour is Pillsbury's Best, made from an exclusive Pillsbury blend of the finest wheats, combined so that Pillsbury's Best contains just the right quantities of protein, moisture, and mineral, just the right color and absorption qualities, to work perfectly for everything you bake. There is no other flour just like it—be sure you get Pillsbury's Best!



Pillsbury's Best Flour

"Balanced" for Perfect Baking



"RCA Radiotrons
bring out
the full tone beauty"

Says

E. F. McDONALD, JR.

President

ZENITH RADIO CORPORATION

"We are proud of the new Zenith Radio. It is engineered and built on the basis of RCA Radiotron characteristics—and tested with RCA Radiotrons. RCA Radiotrons bring out the full beauty of Zenith tone... For the full thrill of Zenith performance we urge all Zenith owners to use RCA Radiotrons. Zenith dealers are instructed that the dependable performance of RCA Radiotrons makes them the logical choice for initial equipment and replacement purposes."

RADIO ENGINEERS ADVISE:

Replace all the vacuum tubes in your radio set with RCA Radiotrons at least once a year. This is the only sure way to maintain good performance. RCA Radiotrons will give you the maximum in selectivity, sensitivity and fidelity.

Old tubes may impair the performance of the new.
RCA Radiotron Co., Inc., Harrison, N. J.



This is the standard in a series of vacuum tubes of K-1 Radiotrons by the leading radio set manufacturers.

RCA Radiotrons

THE HEART OF YOUR RADIO



What's New in Fashions?

No. 6920.—Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires 4 1/3 yards of 35-inch material. For contrasting material 1/2 yard 35 inches wide cut crosswise is required. Price 15c or two for 25c.

No. 6924.—Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. A 10-year size requires 2 1/4 yards of 35-inch material. For collar, belt and cuffs—1/2 yard 35 inches wide is required, cut crosswise. Price 15c or two for 25c.

No. 6534.—Girls' dress. Cut in five sizes: 1, 2, 3, 4 and 5 years. A 3-year size requires 1 1/4 yards of material 32 inches wide or wider. For yoke and sleeve bands of contrasting material 1/3 yard is required. Price 15c or two for 25c.

No. 6912.—Ladies' dress. Cut in eight sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 46-inch size with revers collar requires 5 1/2 yards of 35-inch material. Without revers collar 4 1/2 yards will be required. For contrasting material 1/2 yard 39 inches wide cut crosswise is required. Price 15c or two for 25c.

No. 6764.—Boys' suit. Cut in three sizes: 2, 4 and 6 years. A 4-year size requires 1 1/2 yards of 35-inch material. 1/4 yard is required for the pockets of muslin or lining, cut crosswise. Price 15c or two for 25c.

No. 6783.—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. A 12-year size

requires 3 1/4 yards of 39-inch material. sash of ribbon requires 2 yards. Price 15c or two for 25c.

No. 6733.—Girls' dress. Cut in four sizes: 6 months, 1, 2 and 3 years. A 2-year size with wrist length sleeves requires 1 1/2 yards of 35-inch material. With sleeves 1 1/4 yards is required. To trim with bias binding requires 2 yards 1 1/2 inches wide. Price 15c or two for 25c.

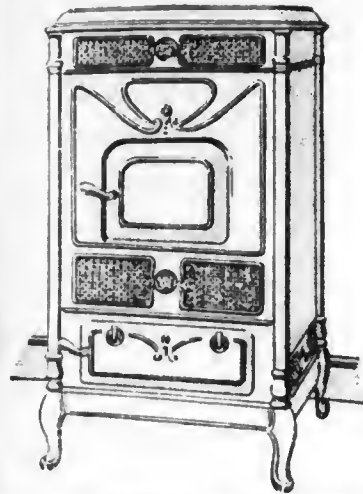
No. 6928.—Girls' dress. Cut in five sizes: 8, 10, 12, 14 and 16 years. A 14-year size requires 3 1/4 yards of 39-inch material. finish with bias binding requires 5 1/2 yards 1 1/2 inches wide. Price 15c or two for 25c.

No. 6933.—Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. A 4-year size requires 1 1/2 yards of material 35 inches wide. Bias binding is used 2 yards will be required. Price 15c or two for 25c.

No. 6916.—Ladies' lounging suit. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. To make the suit requires 6 1/3 yards of 35-inch material. To trim coat and trousers with bias strips as shown in the large view requires 1/2 yard of material 39 inches wide cut crosswise. Price 15c or two for 25c.

HOW TO ORDER

Write plainly, giving pattern number and size. Address Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.



The Most Modest Budget Will Permit Owning This Economical Parlor Heater

You will be greatly surprised to find how far a scuttle of coal lasts in a NEW Winola Parlor Heater. Exhaustive tests were made to determine the best arrangement for the grates, heat radiation and draft control. Thousands tell us that the NEW Winola "pays for itself."

Its beauty of design will add dignity to any room. Its economical operation will keep your coal bills down. A Liberal Five-year Guarantee Bond is given with every Winola.

Wincroft Stove Works
Middletown, Pennsylvania



A FEW
MEN
WITH CARS
WANTED
AT ONCE

Free BOOK
ON CARE OF YOUR DOG

A valuable, illustrated 104 page treatise—based upon over 50 years experience in the treatment and feeding of dogs. There is a special Glover Medicine for most conditions. Sold by druggists everywhere. Should they refuse the particular Medicine you need, obtain it at once by writing direct to us. For Free book write

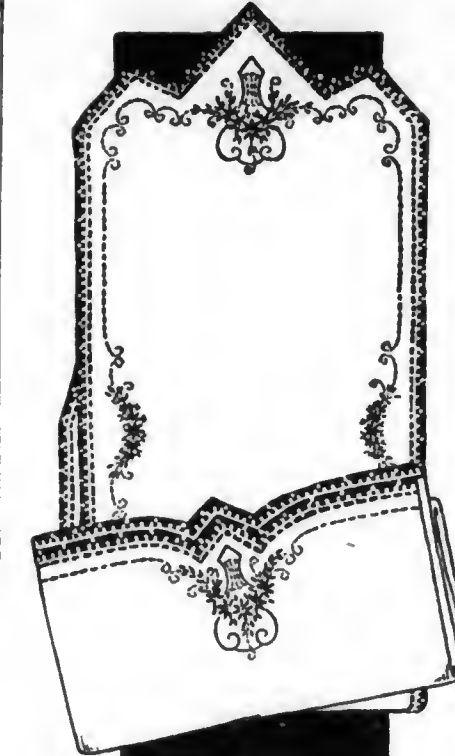
GLOVER'S
Imperial
DOG MEDICINES
119 Fifth Avenue, New York, N. Y.

KILLS 103 RATS ON NEBRASKA FARM

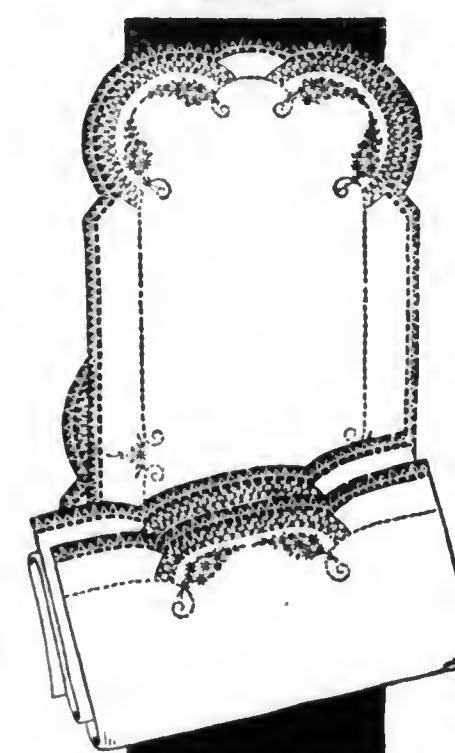
A Nebraska farmer killed 103 rats in 12 hours with K-R-O (Kills Rats Only), the product made by a special process of squill, an ingredient highly recommended by the U. S. Government. It is sure death to rats and mice but harmless to dogs, cats, poultry or even baby chicks. K-R-O is today America's most widely used rat and mouse exterminator. Sold by druggists on money back guarantee.



FREE RADIO CATALOG
Lowest Wholesale Prices
All kinds of radio bargains. New 1931 Screen Grid, all-electric, A. C. Sets in beautiful Conquest and battery operated sets. Write today.
ALLIED RADIO CORPORATION
10 W. LAKE ST. DEPT. 735 CHICAGO



No. 2451



No. 2454

Pillow Cases and Scarfs

THESE sets consist of an 18x45-inch scarf and one pair of 36x42-inch pillow cases, both sets of which are completely hemstitched ready for crochet edge. Material of scarf is a fine weave white embroidery cloth similar to Indian Head and material of cases is a splendid quality seamless tubing.

The price of either of these sets, consisting of scarf and pair of pillow cases is \$1.25. If the larger size pillow cases, 36x45, are desired, the price of the sets is \$1.35 each. Fast colored embroidery floss is 35c extra for each set. Complete instruction chart showing color scheme for finishing is furnished with each design.

Address Embroidery Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

For the Youngster

DESSERTS for children can be made healthful and attractive by simple planning, suggests the New York state college of home economics at Cornell University. One difference between correct meals for adults and for children is in the desserts. Pies, sweet puddings, frosted cakes and other rich dishes, though not injurious to adults if eaten in moderate amounts, are entirely unsuitable for young children.

A fruit cup of oranges and other mild, ripe fruits furnishes a good dessert for a child's meal. Baked fruit or simple fruit sauces made of apples, prunes, or pears are recommended. When apple pie is made for the grown-ups in the family it is little extra work to put some of the peeled and sliced apples in individual baking dishes and make baked apple sauce.

OPEN Your SEARS Catalog to the . . .



LOWEST PRICES . . . in 10 YEARS

The World's Largest Store is ready to serve you, at the lowest prices in ten years. Not alone the lowest prices we have quoted in ten years, but the lowest prices offered by any reputable organization.

You will be thinking more and more of thrift this Fall. And when you do, reach for your Sears catalog to find the lowest prices for the family, the home, the shop, the auto and the farm.

Leadership in Style, Too!

While our buyers were securing these low prices for you, they were also alert to the new style influences in wearing apparel and in home furnishings.

The wanted styles this Fall are all prominently displayed in our new catalog. No matter what you need, we have it for you, of guaranteed quality, at a lower price.

Send the Coupon

If you have not received your copy of this 1100-page new "Thrift Book of a Nation," send for it today. It is free, of course. It quotes lowest prices on 46,000 articles for the family, the home, the shop, the auto and the farm.

SEARS, ROEBUCK AND CO.

Chicago, Philadelphia, Boston, Minneapolis, Kansas City, Atlanta, Memphis, Dallas, Los Angeles, Seattle
(Mail Coupon to Store Nearest You.)

Send
Now
for
Your
Copy

Send me your Latest General Catalog.
Name _____
Postoffice _____ State _____
Rural Route _____ Box No. _____
(Please give both Route and Box Numbers if on a Rural Route)
Street Address _____



ENDURING QUALITY

BURGESS is a scientific institution that knows "how" to build quality into a battery. This fact accounts for the unusual capacity, power, length of service and dependability in Burgess Batteries for radio, ignition and flashlights.

Buy them!

BURGESS BATTERY COMPANY
General Sales Offices CHICAGO
New York Chicago San Francisco
In Canada:
Niagara Falls and Winnipeg



BURGESS

When writing advertisers please mention Pennsylvania Farmer



The experience of years, throughout the country, points, unquestionably, to this roofing—Wheeling Channeldrain. It gives you everything you should expect—safety from lightning—safety from fire—permanence that only this modern copper alloyed steel of which it is made can provide—and last, but not least, economy in the purchase and application.

Channeldrain is made of genuine COP-R-LOY, the Copper Alloyed Steel, that has twenty years of widespread use to its credit.

You owe it to yourself to learn the facts about Channeldrain. Ask your dealer. Do it today.

WHEELING CORRUGATING COMPANY, Wheeling, West Virginia
Branches: New York Buffalo Philadelphia Chicago
Kansas City St. Louis Richmond Chattanooga Minneapolis
Des Moines Detroit Columbus Ohio



Wheeling Hinge-Joint Fence
A tough, strong fence made lasting by the use of COP-R-LOY, the Copper Alloyed Steel. Full gauge wires coated with pure molten zinc for extra resistance against wear and weather. Your dealer will gladly explain the many advantages in fencing with Wheeling Fence.

Drouth in the Apple Orchard

By S. W. FLETCHER

THERE are two ways to avoid serious damage in the apple orchard from a protracted drouth. One way is to irrigate. A considerable number of growers in the eastern states have pumped or hauled water to their apple trees this summer, especially to varieties that suffer most from drouth, as the Stayman. Most of these men report that the irrigation paid. Another way is to fill the orchard soil with organic matter by plowing under sods or cover crops so that it will hold more water. Usually this is the more practicable method, but it must be begun several years before the drouth occurs.

On September 5th about one hundred apple growers and Experiment Station workers from Pennsylvania and neighboring states met in the experiment orchards at State College to inspect the effect of the drouth on the different plots. Two unprecedented dry years have created an exceptional opportunity to observe the influence of different cultural treatments on the resistance of the trees to drouth. The trees themselves told the story, with a little prompting from R. D. Anthony and F. N. Fagan. The plots were in the old Experiment Orchard, which was planted by the late Dr. J. P. Stewart in 1908. They have been under practically the same fertilizer or soil management treatment for 22 years.

Benefited by Organic Matter

Without going into detail concerning the varying treatment of the numerous plots, it was quite evident that certain plots were outstanding in the vigor of the trees, the size of the crop and the size of the individual fruits. Invariably, these were the plots which had been benefited by the addition of large amounts of organic matter at some previous time, either from sods or from cover crop. Determinations showed that they contained several times more soil moisture than adjacent plots in which no special effort had been made to maintain the organic content of the soil. The crop was large and the fruits were sizing up well, many of them being already two and three-fourths to three inches.

Part of this satisfactory outcome may be attributed to severe thinning of the fruits, which now hang six to nine inches apart, but undoubtedly most of it is due to favorable soil conditions. The rainfall deficiency for the season at State College is now nine inches as compared with a deficiency of 13 inches in some other sections of the state, but it is dry enough to affect the apple crop very seriously in all neglected orchards.

Sod in the Orchard

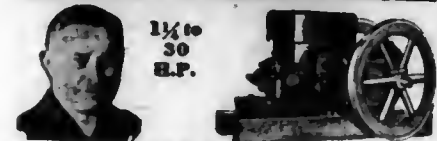
The experimental evidence at State College indicates that a sod rotation is a more feasible method of maintaining organic matter in apple orchard soils than annual cultivations with cover crops. By this is meant keeping the orchard in some kind of a sod, preferably a leguminous sod, as alfalfa, sweet clover or mixed clovers, for two to four years, then turning this under and reseeded. If the sod is turned in the autumn or early winter it may be practicable to reseed the following April or May, but usually it is better to have the sod decay for a season and seed an annual cover crop that year, such as millet, and lay down the sod again early the following spring. The grasses may be used for the orchard sod, but are inferior to the legumes. If bluegrass is seeded, or if it comes in naturally, the sod should be turned frequently since a tight bluegrass sod robs the trees of nitrogen.

Annual cultivation with cover crops has not maintained the organic content of orchard soils in the State College.

(Continued on page 17.)



AMAZING 60th ANNIVERSARY OFFER



NO MONEY DOWN—A YEAR TO PAY
With my new plan you can learn for yourself how much money a lifetime WITTE can make for you... how much time and labor it will save... either your own or hired help. Prove these facts on your own place... before you pay me a single penny.

FACTORY-TO-YOU PRICES
On my latest engine, the best ever made. Enclosed—Self-Oiling—with Timken Roller Bearings that never require adjustment, guaranteed for a lifetime! Save Fuel and Oil. It's the cheapest hired man on earth.

Engine Comparison Chart—FREE
Write today for my new FREE ENGINE BOOK and COMPARISON CHART and we will send you NO MONEY DOWN.

WITTE ENGINE WORKS
2470 Oakland Ave. Kansas City, Mo.
TIME TESTED SINCE 1870



This REMINGTON SHEATH KNIFE is just what you need for hunting, fishing and camping trips. It has a 4 1/2 inch blade of finest steel, with handle shaped for non-slip grip and a heavy leather sheath. We will send you this knife

FREE
of charge on receipt of only \$1 for a two-year subscription to *Hunting & Fishing*, a 52-page monthly magazine crammed full of hunting, fishing, camping and trapping stories and pictures, valuable information about guns, revolvers, fishing tackle, traps, law changes, best places to get fish and game, etc.

Clip this ad, and mail today with \$1.00 bill to
HUNTING & FISHING
107 Transit Bldg., Boston, Mass.

Reading Bone Fertilizer
Quality Service Satisfaction
HIGH GRADE FERTILIZERS
READING MEAT MEAL
DOW'S AGRICULTURAL SPRAYS
(This trade mark means quality)

Ask your dealer for
Reading Bone Fertilizer
Reading Bone Meal
Reading Bone Fertilizer

Reading Bone Fertilizer Co., Reading, Pa.

FARQUHAR ENGINES and BOILERS
For Nearly Every Use.
Write for Bulletins
A. B. FARQUHAR CO., Limited, York, Pa.



Get a load of this...



BACK your pipe up to a tidy red tin of Prince Albert and chute in a load of sunshine. Hold a match to the flue and pull that blissful blue smoke up the stem. You know it's going to be like that the instant you open the tin and get P.A.'s fragrance full in the face.

What a taste! What a joyous justification of the jimmy-pipe! Cool as a ticker-tape bringing bad news. Sweet as a rally that hands you

a profit. Mellow and mild and refreshing, down to the last bit of ash in the bowl. A pipe-tobacco with a pedigree, Men, and no fooling.

Any way you take it... pipe or roll-your-own... Prince Albert promises the contentment that only this better tobacco can bring. Try it and see. You can load-up and light-up from shower to sheets, and enjoy every wonderful, joy-wadded puff.



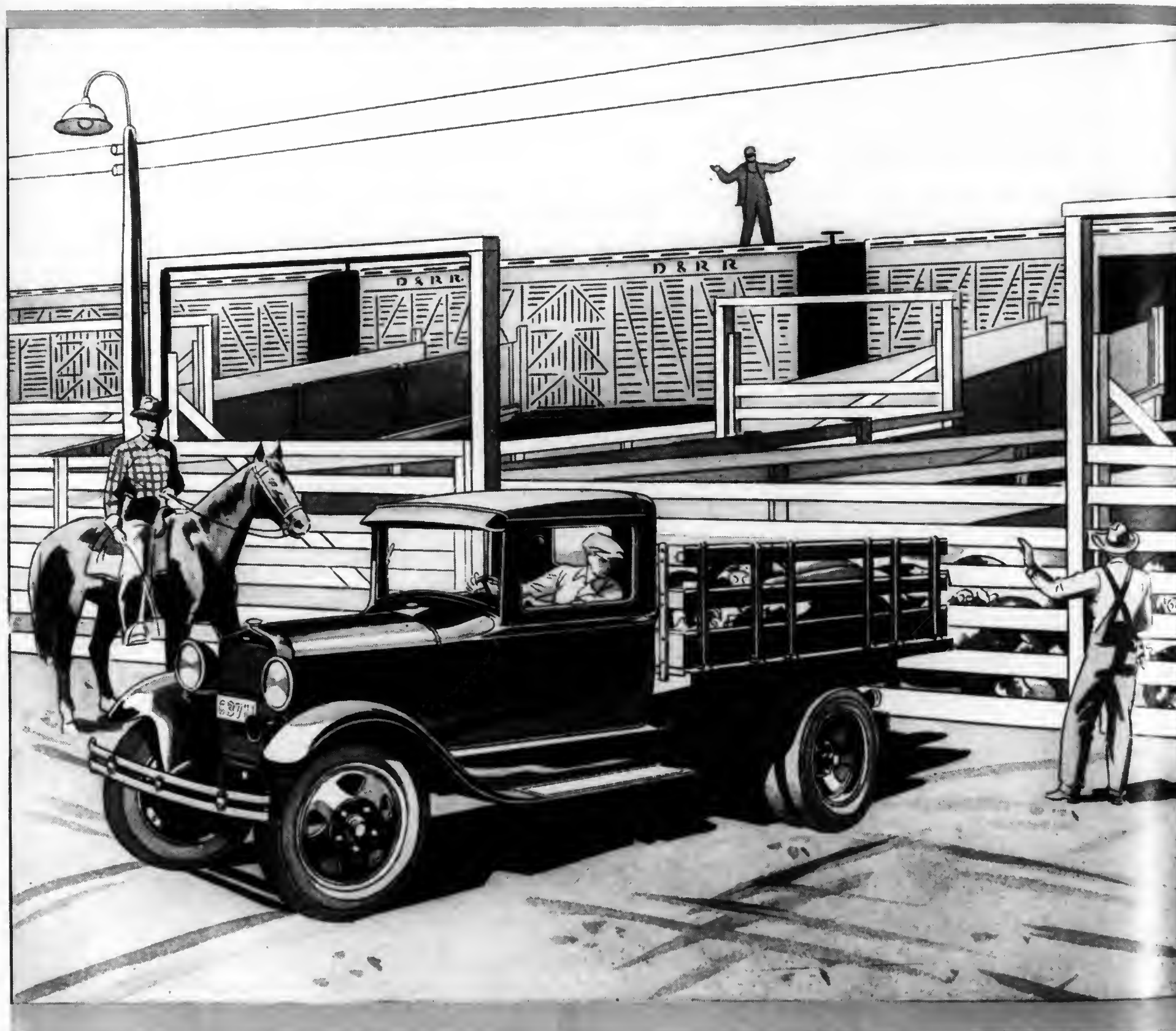
The revenue-stamp tells you there are TWO full ounces in every tin.

PRINCE ALBERT

—the national joy-smoke!

© 1930 R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

Hauling hogs to the stock-yard or feed to the farm, the Ford Truck pays its way



THE design of the Ford truck is such that it lends itself exceedingly well to farm use. It is built of the finest materials obtainable. All moving parts, which have a direct bearing on its performance over a long period of usage, are manufactured with remarkable care and precision.

The price of the Ford truck is low, in accordance with the policy which characterizes all Ford products. This low price is made possible by Ford production facilities, and by a sincere desire on the part of the Ford Motor Company to provide a low-priced haulage-unit of high value.

You will be pleased by the way the Ford truck carries a load over uneven ground, up the hills, across soft, muddy stretches. And by its able performance under all the varying conditions of road and load that a truck must meet on a farm.



Strength of the Ford truck chassis is one reason for the long and reliable service it gives. Forty different kinds of steel go into the making of the truck. Fine steel forgings are extensively used. These all give increased resistance to strain and wear, without adding to chassis weight. More than twenty ball and roller bearings reduce friction at important points, and prolong the life of the truck.

New features of the truck, which add to its value, are the spiral bevel gear rear axle; two optional gear-ratios; 4-speed transmission; heavier front axle and spring; larger brakes; and dual rear wheels available at small additional cost.

Go to your Ford dealer and see this truck. Consider its low first cost. Then let the dealer show you how inexpensive it will be to operate and maintain in your service.



Name and address of the game on every box

NAME your game—and there's a Remington Game Load waiting, already addressed to the game you want.

No matter what you may intend going out after—goose, duck, pheasant, dove, grouse, quail, snipe, squirrel, or rabbit—the right load is ready for you. The powder is not measured by grains or drams, by weight or bulk, but by accurate tests to determine uniform velocity, pressure, penetration and pattern, an entirely new method insuring a positive uniformity of result that will improve your shooting.

Remington Game Loads are made wet-proof by Remington's patented process.

Just name your game to your dealer, tell him you want a Remington Game Load—and the load will do the rest.

Kleanbore Cartridges in rim fire and center fire sizes have brought a new standard of accuracy to rifle shooting on the range and in the woods. They protect the barrel from rust, corrosion, pitting, and leading. You owe this protection to your rifle.

REMINGTON ARMS COMPANY, Inc.
Originators of Kleanbore Ammunition
25 Broadway New York City



For long shots at all kinds of game, Nitro Express Game Loads are supreme. They outshoot any long range, heavy loads on the market.



"They make my tires!"

Ownership of Goodyear Tires is proud ownership. They are superior tires, by a margin great enough to have made them the largest selling tires in the world. They embody the prestige as well as the values of leadership. They bear the greatest name in rubber: greatest because of Goodyear's services to transportation, on land, sea and in the air. When you buy tires buy a name you can be proud of. There is a deep and proper satisfaction in knowing that your judgment coincides with the world's on that quality which has made "More people ride on Goodyear Tires than on any other kind!"

Goodyear is now building for the United States Navy the two largest blimps in the world has ever seen, each being nearly twice as large as the famed Graf Zeppelin. Goodyear also operates six smaller blimps as well as several airplanes in its service.

Copyright 1930 by The Goodyear Tire & Rubber Co., Inc.

October 1, 1930.

Drouth in the Orchard

(Continued from page 12.)
lege experiments. These plots are slipping, as compared with the sod rotation plots. Possibly this is partly because the cover crops were sown late in the summer during the early years of the experiments. The evidence is quite clear that they should be sown earlier—in May instead of in July or early August—and that this early seeding not only results in a larger amount of humus, making material to turn under, but also that it does not prevent the crop on the trees from carrying out to good size.

After Twenty Years

Reviewing the history and performance of these plots for the past 20 years, Dr. Anthony advances the opinion that tree growth and crop production have been determined more by the amount of organic matter turned under than by the fertilizer treatment. The main reason for applying fertilizers to the apple orchard, in his judgment, is not so much to modify the growth of the trees direct, as to promote a heavy growth of herbage: when this is turned under it promotes growth and fruitfulness. He would not disparage the common practice of making early spring applications of nitrogenous fertilizers, but he would stress the importance of this and all other fertilizing or soil management practices that make it possible to produce a very heavy growth of herbage in the orchard, for the ultimate benefit of the trees. It may be assumed that it seldom is practicable to add mulching material that has been grown outside the orchard in most cases, the humus-making material must be grown in the orchard.

Truck Crops

By GILBERT S. WATTS

HAVE you inspected the strawberry patch recently? A month or six weeks ago we had ones practically weed free. Today I found several small spots of chickweed, another of young dock, some dandel just started in another place and a few other unwelcome visitors in my new planting. At the earliest opportunity and certainly before the month ends we will go through this piece with small triangular hoes and make an effort to clean up. The young perennial and biennial weeds that have only started now would become serious pests next June.

Buggy Beans

Will you please tell me how to keep bug beans for winter use? We never could keep them, they always get buggy.
J. C. Z.

BEANS that are free from weevils, or their eggs, may be kept by storing in tight, closed containers.

When the beans are not to be used for seed a simple treatment for small quantities is to spread the beans in shallow pans and hold at a temperature of 120 to 145 degrees F. in the oven for several hours.

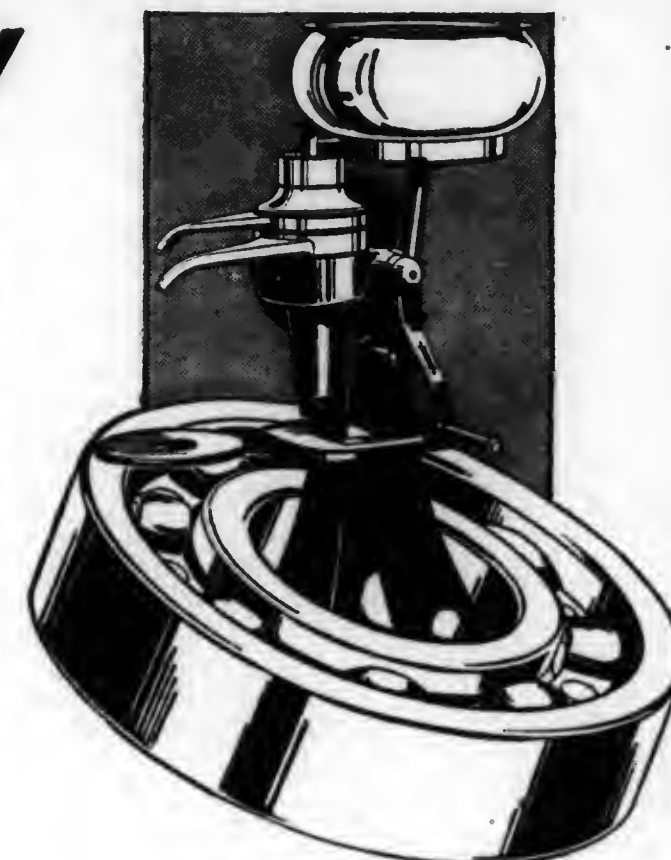
A thoroughly proved method that will not injure peas or beans for seed or food is fumigation with carbon disulphide. Place the beans in an absolutely tight vessel, such as a pail, large can or water-tight barrel. An ounce or two is enough for a common barrel. Pour directly onto the seeds or into a pail tin and tie several thicknesses of heavy paper tight over the open end of the vessel to retain the gas. Do not open for 24 to 48 hours. Temperatures of at least 60 degrees are necessary to secure satisfactory results. Inspect occasionally and repeat if necessary.

Do not handle the liquid near open lights or fires. The gas is very explosive.

PENNSYLVANIA FARMER

(289) 17

The Masterpiece of Cream Separator Design and Efficiency



Bankers, county agents, creamerymen, dairymen, members of cow-testing associations, and newspaper publishers have seen and vouched for the remarkable performance of the McCormick-Deering Ball-Bearing Cream Separator under varying conditions, at public demonstrations held throughout the dairy regions this year. And this unequaled performance of the McCormick-Deering is being duplicated every day on hundreds of thousands of dairy farms where milk is skimmed under all conditions and varying temperatures. Hot or cold or in between—its all the same to this cream separator.

The McCormick-Deering is the masterpiece of cream separator design and efficiency. It is the world's easiest-running and closest-skimming cream separator. The McCormick-Deering is the ball-bearing machine—with ball bearings at all high-speed points. It is as good looking and as easy to clean as it is efficient.

Consult with the leaders in your community who have seen the McCormick-Deering in operation. Ask any McCormick-Deering owner about the cream-saving qualities of his machine. And have the McCormick-Deering dealer demonstrate right on your own farm.

INTERNATIONAL HARVESTER COMPANY
606 So. Michigan Ave. OF AMERICA Chicago, Illinois
(Incorporated)

Branches at Pittsburgh, Harrisburg, Philadelphia, Pa., and at 93 other points in the United States.

McCORMICK-DEERING

Known for Years as the
World's Easiest-Running
Cream Separator

FREE 54 PIECE HORN OF PLENTY DINNER SET

SELL ONLY 10 POUNDS OF COFFEE

and with every pound give to each purchaser all the following articles:
Powdered Ketchup, Hot Sauce, Hot Dessert Jelly, Hot Pepper, and Jar Prepared Mustard (as per plan 1225) and this Dinner Set is yours. Hundreds of other useful premiums or large Cash Commissions.

SEND NO MONEY-WE PAY FREIGHT

10 Pcs. Full Size Silver Aluminum Set including: Preserver Kettle, Mixing Bowl, Sauce Pan, Fudding Pan, Cake Pan, Pie Pan, Dipper, Graduated Measuring Cup, Salt and Pepper Shakers, extra 5 Pcs. besides Dinner Set, for handling order promptly. We trust you and pay freight. You risk nothing.

Write Today for Our Big Free Catalog.
THE PERRY G. MASON COMPANY,
Dept. 588 Cincinnati, Ohio.

SHEEP CORRIEDALES

The Coming Farm Flock Sheep
Two Vervetables on your fine wool ewes, are the two lambs and have the best breeding stock you ever owned. A great opportunity this year. A few fine ewes for sale at \$20.00 to \$30.00. Also good Merino rams at \$25.00 and up.

J. E. WALKER & SON,
Woodbine Farms, Gambier, Ohio
REGISTERED SHROPSHIRE—Vigorous, self-sufficient, good type. Priced very reasonable.
A. F. MERRELL, Geneva, Ohio

THIRTY REGISTERED SHROPSHIRE, one and two-year-old rams, bred by our imported rams.
HYLMEDE FARM, Beaver, Pa.

REGISTERED SHROPSHIRE RAMS from imported animals.
L. M. HEIGHWAY, Bluffton, Ohio
SHROPSHIRE AND OXFORD RAMS for sale. Registered papers furnished. Priced reasonable.
BROCKETT FARM, Atwater, Ohio

Fancy Southdown Rams and Ewes from one of the oldest breeders in Ohio, at reasonable prices.
A. T. Freed & Son, Basil, Ohio

SHEEP LINCOLN RAM LAMBS

from Imported stock. **S. C. Sigler,** Londonville, O.
REG. HAMPSHIRE DOWN RAM, 1 year old, good individual with best of breeding.
H. W. ALLISON, Mercer, Pa.

HAMPSHIRE AND OXFORD RAMS, and Oxford Ewes, Papers furnished. Prices cut.
J. W. TAIT & SONS, Mercer, Pa.

DELAINE RAMS
A fine grow, shipped on approval.
F. H. Russell, Box 35, Wakarusa, Ohio

DELAINE MERINOS of the Champion strain. B. & F. type, large size, heavy fleeces. Write **S. H. SANDERS,** A. 2, Ashland, Ohio

For Sale Rams of heavy C Type, Delaine Merinos, Mutton and Wood Comb. **Lee R. Scott & Sons,** Burgettstown, Pa.

DAIRY CATTLE

REG. GUERNSEY BULLS, 1 month to 3 yrs. Registered and grade. **McCullough Farms,** Newville, Pa.

DAIRY CATTLE

GUERNSEY BULLS 11 and 22 months of age. Registered, accredited.
Harry G. Binkley, R. 2, Conestoga, Pa.

FOR SALE—Two Jersey calves, 10 months old. Shesmet farm breeding. Real calves. Good individuals. Write for price and description. **Thos. J. Wintermute,** Edgewood Farm, Horseheads, N.Y.

VERY PROMISING, well grown, solid Jersey heifer, 7 mos. and one bull 6 mos. reg. Accredited herd.
W. F. McPARRAN, Furness, Pa.

AYRSHIRE CATTLE of the best blood lines. Herd T. B. Accredited. Animals of both sex and all ages.
Geo. B. McConnell, Wellington, Ohio

For Sale High-grade Holstein springers, car-bred lots, tested counts.
Glerner & Briggold, West Concord, Minn.

SWINE

CHESTER WHITE PIGS, 6 weeks old, \$4.50, 8 weeks, \$5.50, 10 weeks, \$6.50. Pigs for breeding, \$8.00, 3 weeks old.
C. LEWIS TAYLOR, Wyalusing, Pa.

CHESTER WHITES—Big type Champion blood with a record of heaviest. C. White litter in state.
L. C. Corman & Son, Beech Creek, Pa.

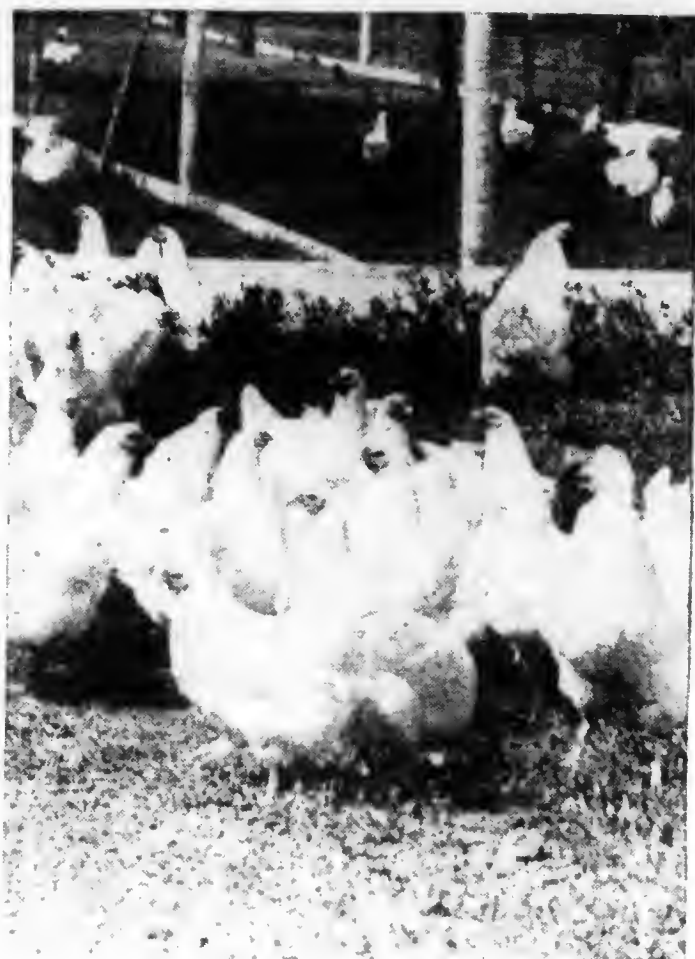
125 BIG TYPE, pedigree Chester Whites from big breeders and big litters. Priced right and shipped on approval.
C. E. Cassel, Hershey, Pa.

Feeding Pigs 15 to 50 lbs. \$4.50 to \$5.00 according to size. Truck delivery on large lots. Mostly Poland-Chinas.
Stanley Short, Cheswold, Del.

HAMPSHIRE PIGS Eight weeks old. **J. J. RAILING,** R. 2, Shippensburg, Pa.

BIG SPOTTED POLAND-CHINAS—Spring born, spring gilt, tried sows, pigs all ages.
BOYD HAMMAN, Shioh, Ohio

BUY HALL'S SUPERIOR TYPE POLAND-CHINAS. Young Pigs for sale now at special low prices.
G. S. HALL, Farmdale, Ohio



INCREASE Your egg production with this great FUL-O-PEP FEED

QUAKER Ful-O-Pep Egg Mash, containing generous quantities of pure, fresh oatmeal, is recognized by poultrymen as the most dependable, uniform and efficient mash for maximum egg production.

Ful-O-Pep Egg Mash increases egg production because its scientifically blended ingredients bring your pullets into a vigorous, healthy condition and provide the stamina for sustained, long-time laying. It contains all the materials for making larger, more uniform, more palatable and stronger-shelled eggs. Each of the ingredients contributes a part toward the production of more and better eggs—the finest proteins, carbohydrates, minerals, vitamins obtainable.

Quaker Ful-O-Pep Egg Mash has demonstrated its worth in stimulating consistent egg production in all climates and in all seasons of the year. The Ful-O-Pep 50-50 combination Growing Mash and Egg Mash will bring your hens safely and speedily through the molting season.

Your Quaker dealer will tell you how to make greater profits from your eggs by feeding Ful-O-Pep Egg Mash. He has Ful-O-Pep Growing Mash and Ful-O-Pep Scratch Grains too. See him today.

Quaker FUL-O-PEP EGG MASH

THE QUAKER OATS COMPANY, CHICAGO, U. S. A.

FREE You should have our new booklet on Increasing Winter Egg Production. It is valuable, informative and costs you nothing. Just write your

Name.....
Address.....
Mail today to The Quaker Oats Company, Dept. H-J, 141 W. Jackson St., Chicago, Ill.

Dealing with Poultry Worms

By E. L. SCHARRING-HAUSEN

I HAVE received a number of letters lately asking about poultry troubles and giving various symptoms, and in many cases these troubles could be definitely attributed to intestinal worms. There is no doubt that such intestinal parasites are one of the most important poultry problems with which we have to deal.

There are two important types of such worms, and several different species in each type. The first type is the poultry roundworm. The eggs of this creature are voided with the droppings, and are commonly present in the soil of poultry yards and ranges, on the floors of poultry houses, on the dropping boards, etc. These eggs are swallowed with food, and in the digestive tract of the fowl hatch and produce the second generation, from which the life cycle goes on. These eggs are quite resistant to outside influences, and are supposed to retain their vitality for as long as two years in the soil under favorable conditions.

One of the best means of combating these worms is to rotate ranges, so that the birds do not run on the same range more than once in three years, and to avoid spreading droppings on land which is to be used as range. Wiring dropping boards, frequent cleaning of houses and other sanitary measures will also help. Air and sunlight are harmful to these eggs, and frequent cultivation of ranges or land that is to be used as range will also help.

Serious Pests

Tapeworms have a very complicated life cycle, passing part of their existence as a segmented flat worm in the intestine of the fowl, from which they are voided as eggs, which require an intermediate host for a second period of development before they can complete their life history in the intestines of a fowl. Some of these hosts are flies of various species, earthworms, snails and probably other forms of life. This makes the problem of controlling tapeworms harder.

Where tapeworms are serious pests, it is necessary to screen the houses to keep out flies, and raise the birds in confinement so that they do not have access to any host of the tapeworm. Once the host containing the second stage of the worm is eaten by a chicken, development in the digestive tract proceeds to the form we recognize as the tapeworm, which produces eggs which are voided by the fowl and taken in by one of the hosts, so that the cycle goes on.

Symptoms are Varied

A very good practice, in addition to sanitary precautions as mentioned under roundworms and also complete confinement, is frequent cleaning of the houses and removal of the manure to screened pit or building, unless the material can be taken and spread out on a distant part of the farm.

Another worm, the pin worm or cecal worm, inhabits the cecae or blind guts, rather than the intestine proper. Control measures as outlined above will help in fighting this pest.

Symptoms of infestation with worms are varied. Capricious appetite, thinness, lameness, blindness and general unthriftness and poor growth are all evidences of wormy birds. Control measures help to reduce the chances of worm infestation, but do not absolutely prevent it, and then the problem arises of how to get the worms out of the birds.

First of all, it must be said that if the birds have been severely injured by the presence of worms, merely removing the worms will not restore them to normal condition, as too much harm has already been done for them to recover completely. However, if the birds have not been too badly hurt, removal of the worms will be

A WONDERFUL FEED

Nothing can equal DRIED BEET PULP

It's the most wonderful supplemental feed known for promoting and maintaining health of animals, thereby increasing milk production in dairy cows and producing rapid profitable gains with beef cattle and sheep.

Yet it does not add to the cost of the ration. It supplements pasture, replaces silage, corn and other carbohydrate feeds. Where hay is short or high priced six pounds of Beet Pulp will do the work of ten pounds of hay, and do it better.

No other feed has such unique health building properties. It's light, bulky, cooling, palatable, laxative. Not only highly digestible itself, it also aids the digestion of other feeds. "Off-feed" days are eliminated.

Low Prices in Effect

Dried Beet Pulp is always profitable to feed but now with the present low prices you certainly should avail yourself of this advantage. Feed it now you'll see immediately how your profits increase.

Dried Beet Pulp which results from the extraction of sugar from beets is the only vegetable feed available in commercial form. Can be delivered anywhere in the United States. Ask your dealer.

Write us for free booklet "Profitable Feeding."

The Larrowe Milling Co.
Dept. P. F.-1
Detroit, Mich.

SAY you saw the advertisement in Pennsylvania Farmer when you are writing to our advertiser

Gets the Worms



Everyone knows Nicotine and Kamala kill worms better than any other vermifuges. But they must be supplied fresh! So Pratt's N-K Tablets are made of fresh Nicotine and Kamala sealed in a hard, airtight, insoluble coating that nothing destroys except the grinding of the gizzard. Thus, a fresh dose of proper size reaches worms at the vital point—the intestine. Worms haven't a chance against Nicotine and Kamala, thus applied full strength. Try a box without delay. See your dealer or order by mail.

Pratt's (NICOTINE KAMALA) N-K TABLETS

Guaranteed "Satisfaction or your money back!"
SEE YOUR DEALER; IF HE CAN'T SUPPLY YOU, ORDER BY MAIL. Enclose money order or stamps, indicating the size and quantity desired. We pay postage.
Adult Size..... \$1.00
Child Size..... \$0.50
6-lb. Birds and over..... \$1.00
100..... \$1.75
1000..... \$12.00
PRATT FOOD CO., 124 Walnut Street, Dept. 146-A, Philadelphia, Pa.

October 4, 1930.

a good thing; and if proper control measures are taken, coupled with specific treatment, much harm can be avoided.

There are a great many different treatments used for expelling worms, some home remedies and some proprietary, while both flock treatments and individual treatments are given. One common flock treatment is the use of two per cent of tobacco powder, or a smaller quantity for young stock, mixed in the mash and fed at intervals. This is especially effective for roundworms. Another flock treatment for both roundworms and tapeworms which is highly recommended by some poultrymen is the mineral oil and turpentine treatment.

Two Types of Capsule Remedies

It is important that pure gum spirits of turpentine and extra heavy white U. S. P. mineral oil be used, and it is best to buy these at a drug store rather than elsewhere, as the treatment may go wrong if the ingredients are not what they should be. One part of turpentine and two parts of the oil are mixed with the scratch grain, at the rate of one and one-half pints of the mixture to 100 pounds of grain, which is then fed in troughs. This dosage is for mature birds. The treatment can be repeated in ten days, and has been found successful by many poultrymen.

However, all flock treatments have one serious disadvantage: the bird which is strong and healthy will eat too much of the prepared mash or grain, while the weaker specimen, which needs the treatment most, will get little or none of it. For that reason, while flock treatments have their place because of cheapness or convenience, individual treatments, while more troublesome and expensive, are usually more effective and certain.

There are two types of individual treatment, one using liquid and the other a capsule. The liquid treatment employs iodine as a vermicide, which is injected into the gizzard by a long syringe or catheter, and is said to be very effective and not as difficult to give as might be thought. This remedy, with a special catheter, is put out by a large drug firm and well advertised.

Capsule remedies are of two types, a gizzard capsule containing the drugs inside a hard covering which is not broken up until it reaches the gizzard and another form inside a gelatine capsule which is also supposed to be broken up in the gizzard, although if hard grain is fed before giving the remedy, the coating may be broken in the crop. Individual treatments are put out by a number of drug and poultry supply firms, and are usually combination treatments to expel both large roundworms and tapeworms. Some of these remedies are said to expel the cecal worms, while other companies state that they cannot be reached by remedies because of their location outside the main channel of the intestine.

Difficult to Name Treatment

In treating birds for worms there is one difficulty in the way. If a remedy is strong enough to expel the worms, there is more or less danger that it will also be strong enough to cause a shock to the birds. This shock may be severe or not, depending on the remedy, the condition of the birds, and the amount of handling done in treating the flock. For this reason, a treatment which may be very successful in one case may not be so satisfactory in another, and it is difficult to name any one treatment which will do the work without harming the flock in all cases.

The best advice is to use the product of some large drug firm which has a good reputation generally, especially if it has been used with success by some one in your locality, to follow the directions given, not to worm flocks which are laying heavily unless there is some special reason for doing so, and to expect some mortality where the birds are in poor condition.



Add Semi-Solid, Science Says, for Pigs and Chickens

When you can get 15c for pork and 40c for eggs, anybody can show a profit on Hogs and Poultry. But when the price comes down to about half that amount, it takes real scientific and economic feeding to make real money. And every smart feeder knows that the most palatable, tasty feeding that will stimulate digestion will make for the greatest economy of pork, poultry and egg production.

THE latest money-making scientific discovery is that of adding Semi-Solid Buttermilk to every feeding of pigs and chickens, no matter what else is fed.

Science has discovered that pigs and chickens have taste the same as hu-

mans, that Semi-Solid Buttermilk has the highest taste-appeal to pigs and chickens, and that finally Semi-Solid aids the digestion in pigs and chickens to such a degree as to produce bigger, firmer pork; bigger, better milk-fed chickens; and bigger and better eggs and more of them.

The news of the amazing results obtained by adding Semi-Solid Buttermilk has traveled so rapidly that the Consolidated Products Co. alone is putting out over a hundred million pounds a year to the farmers and feeders of America.

Make this Test FREE

We want to show you that The GIZZARD CAPSULES are a real worm medicine. Show you how easy to use; and how much better your birds will do.

Ask your Dealer for this simple package, or write us. Free, postpaid. Test The GIZZARD CAPSULE.

IT TAKES THE WORM MEDICINE TO THE WORMS. An insoluble capsule carrying a triple combination medicine—for Tape, Round and Pin (cecal) worms. The gizzard crushes this capsule, releasing the medicine where it pours directly into the intestines upon the worms. No medicine can be absorbed along the way, which is better for the birds. 5 times as effective—because medicine cannot mix with food or drink and be weakened. The correct dose, full strength, reaches the worms. That is why use of The GIZZARD CAPSULE is so rapidly increasing. More than 60 millions last year.

DON'T FEED THE WORMS Worms live upon the food fowls eat, mixing, fermenting, and rotting egg production. The GIZZARD CAPSULES now! Sold at drug, feed, hardware stores, chick hatcheries or from factory, postpaid. Adult also—50¢ each, 100—\$1.00, 500—\$4.50, 1000—\$8.50. Chick size for half-grown chickens and pullets—1¢ each. **NOTE**—There is only one GIZZARD CAPSULE. Accept no substitute that may be sold to you "just like The GIZZARD CAPSULE" (just as good). Look for the name GIZZARD CAPSULE on the package. Made only by the inventor, the

GEORGE H. LEE CO., 2484 Lee Bldg., Omaha, Neb.

EF-FISH-ENCY THE MONEY MAKER



EF-Fish-Ency Feeds are the feeds. Concentrated and home mixed, which contain STRUVEN'S FISH MEAL.

They produce meat, eggs, milk—and profit—quicker than rationing that contains only hard-grown feeds. WRITE TODAY for free sample and booklet, "Care and Feeding of Poultry, Hogs and Cattle."

CHAS. M. STRUVEN & CO.
114-116-H. S. Frederick Street
Baltimore, Md.

2,000 S.C. WHITE LEGHORN PULLETS

4 1/2 Months Old, \$1.20 each.

100 Pullets, \$117. P. O. B. Stockton, 11-2 pullets will soon lay a total box of these prices. Positively the best call. All healthy birds, grown at our farm from special Hollywood matings. None better at any price. Send check or money order.

PINE TREE HATCHERY and POULTRY FARMS
Box F, STOCKTON, N. J.

PARKS' BARRED ROCKS

Big, husky, healthy, free range reared youngsters. Stay healthy, ready to start laying. Cockerels and cocks able to stamp the ability to lay and pay in your flock. Parks' Barred Rocks are America's oldest and greatest laying strain of fowls—carefully selected, improved and pollarded for egg-size since 1880. Winners in all the leading contests. Lays up to 320 eggs. Laying at 119 days. Cockerels, heavy, dark averages up to 271 lbs. Five latest robes and catalog. J. W. Parks & Sons, Box 5, Altoona, Pa.

Navy Brand Concentrated Buttermilk

From Tuberculin Tested Cows. 25 per cent milk solids, 8 per cent lactic acid, thick as custard with no foreign ingredients. Reduces loose-chicken and lessens danger from coccidiosis. Increases egg production and promotes fertility and hatchability. Good for chicks, broilers and laying hens. Sold direct from the factory in barrels of about 45 lbs. Half barrels, about 200 lbs. Write for prices. TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, PA.

BROILER—RAISERS

SHIPPING CRATES LOANED FREE. SHIP YOUR LIVE BROILERS and other poultry to New York's Oldest Live Poultry House. Est. 1883. We are bonded commission merchants. Birds fed returns made daily. Highest prices. Our outlet is unlimited. Inquire about us. Write for quotations, crates, tags, shipping instructions. Holidays Catalog. Order P. O. BOX 400. W. KRAKOR POULTRY CO., Inc., West Washington Market, New York City.

WE NEED

more men and women to work on the farm. Write for shipping cards. ZENITH-GODLEY CO., 171 Duane Street, New York City.

ULSH'S Superior Chickens

ULSH'S Superior Chickens are the best of the breed. They are the only chickens that are guaranteed to lay 300 eggs a year. Write for prices. J. A. Baumgardner, Beaver Springs, Pa.

QUALITY CHICKS

J. A. Baumgardner, Beaver Springs, Pa.

READ THE ADVERTISEMENTS TO KNOW WHAT IS BEST AND WHERE TO BUY

THE YOUNG PEOPLE

The Proof is in the Project

"COME in and meet my parents," was the salutation that greeted Charlie Carey as he stepped out of his car on his first visit to the home of Elmus Craun. Mr. Carey is the County Supervisor of Vocational Agriculture in York county. During the past winter he conducted classes in vocational agriculture in eight high schools. Elmus, one of his enthusiastic pupils in his Dover high school class, had decided to carry a project of nine colonies of bees and a fourth of an acre of strawberries.

Elmus Craun, like the other 4,400 farm lads in Pennsylvania who studied vocational agriculture during the past school year, was ready and anxious to put into practice the things he had studied. Digging deep into textbooks, bulletins and farm papers, these "future farmers" have attempted to build up an informational background that can be used in their practical work.

In 200 centers in Pennsylvania the public schools of this Commonwealth are offering four years of training in vocational agriculture; every course is conducted by a four-year agricultural college graduate. The school year is only the preparatory period for the agricultural work which follows. Plans are well laid and every effort put



This profitable poultry flock belongs to Malcolm Wilkins, Bradford Co., Pa.

business enterprises. Dad was not asked to provide free seed or to donate the use of horses or farm equipment. Cost accounts were kept, labor and interest on investment, rental of land and depreciation of equipment and buildings were common items in all project reports. If vocational agriculture is to stand the acid test, such items must appear on the ledger with profit, yield and income.

H. C. Fetterolf.

Pennsylvania Wins Contest

DAVID WARFIELD, Jr., an agricultural student in the Fawn Township High School, York county, won the Future Farmers' Public Speaking Contest at the Eastern States Exposition, Springfield, Massachusetts. David was the winner in the state-wide elimination contest for Pennsylvania which was held at State College during the week of August 18th. His expenses to Springfield were borne by the Keystone Branch of the Future Farmers of America.

In winning the contest at Springfield, David is now the regional representative of the states of the North Atlantic region and will compete in the national contest which will be

held at the Eastern States Exposition as the winner in the Regional Contest. David distinguished himself in the state demonstration contest at the State Farm Products Show last year, winning a one hundred dollar scholarship. He is a student of Charles D. Carey, County Vocational Supervisor of Agriculture in York county.

David's address in both the state and regional contests was Rural Electrification.

Riddles

1. What is the first thing you set into the garden in the spring?
2. There was a boat on the river, in it were just four persons, yet there wasn't a single one there. How is that?
3. As I was going over London Bridge I met my sister Mary. I cut off her head, drank her blood and threw her body into the river. What was it?
4. What goes around the house peeping at every corner, yet leaves no track?
5. What goes upstairs black and white and comes down red?

Watch for answers next week.

Little Folks' Corner

Timmy Twitchet's Prisoners

By RUTH PLUMLY THOMPSON

TIMMY wakened up with a sigh. He had something on his little mouse mind—that birdcage full of dolls and soldiers. "The poor dears must be hungry," said kind-hearted Timmy. You remember how the dolls had tried to take away Timmy's house in the garret, and how Timmy had coaxed them into the birdcage and locked the door? Well, no wonder Timmy sighed, for it surely was a question what he should do with these bad little toys, who so selfishly wanted to deprive him of the abandoned dollhouse. He got dressed very slowly, then pulling down his coat he walked out on the porch.

The dolls had spent a terribly uncomfortable night on the floor of the birdcage, and were already sorry they had ever mounted to the garret. Miss Arabella coughed plaintively and remarked that if she had known what poor fighters the wooden soldiers were she'd never come a step with them. This, of course, provoked the sol-

Four-H Club Girls Camp at Rose Point

FOUR counties, Butler, Beaver, Lawrence and Mercer, joined in an outing for girls at Rose Point on the Butler and New Castle road. The camp was under the direction of the Agricultural Extension leaders, Janice Wrathall and Eleanor Drury, during the week of August 19-23. Miss Harmony Hutchinson, Pennsylvania State Club Leader, directed the games, songs, stunts, folk dances, campfire programs and swimming.

Questions on better living and how members might bring health and happiness to our club members back home were discussed. Another feature of interest was the illustrated lecture given by Miss Jeffers, food Specialist of State College.

Miss Betty Buckley of Beaver county will represent Western Pennsylvania at Camp Vale, Springfield, Mass.

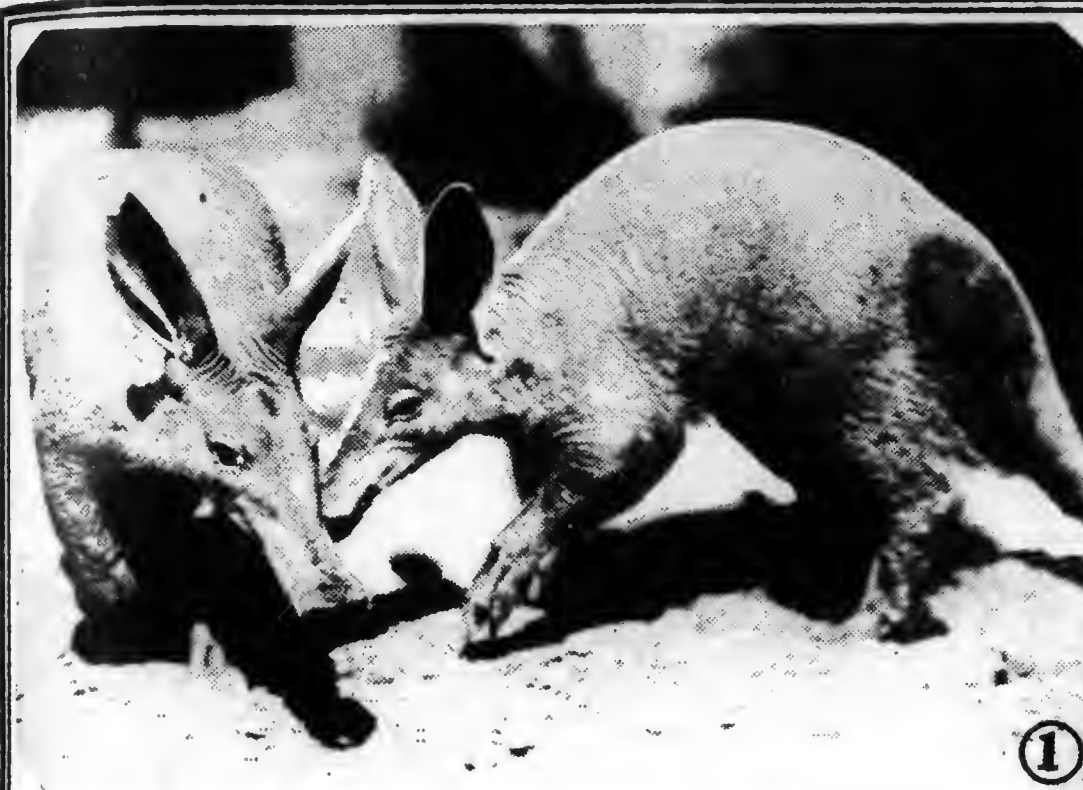
Miss Ada Roth and Miss Alberta Singlaub, who represented Butler county at the Leadership School in State College, August 11, were directors during the week.

Some of the campers were Myra Coffman, Grace Noble, Mae Kennedy, Helen Bicker, Jean Pepper, Lillian Schwenguber, Alberta Singlaub, Julia Oliver, Dorothy Cleland, Mary Ann Dunn, Ada Roth and Esther Roenick of Butler county; Estella Green, Sally McCready, Ruth Buckley, Betty Buckley, Catherine Goehring, Jane Nickels, Esther Dixon, Gladys and Doris Howe, June Shade, Mary Jo Hogan, Ruth Holmes, May Engles of Beaver county; Mary Coulter, Marguerite Baker, Violet Matheny, of Mercer county; Blanche Carr, Opal Martin, Laura Brown, Ida and Agnes Peoples, of Lawrence county.

For Your Party

HAVE letters of the alphabet written on cards, one letter on each card. Make three or four cards of each letter. One player mixes the cards and then holds them face downward. Before he turns a card, he may say "name an automobile that begins with this letter;" then he holds the card exposed to view. The first player to give an answer receives the card; if no one answers in five seconds the card is returned to the pack. The leader may make use of such subjects as birds, clothing, names of boys or girls or cities. When the cards have all been given out, the game is won by the player holding the largest number.

PASSING EVENTS IN PICTURES



①



②



③

1. The only "Abyssinian Earth Hogs" in captivity—a strange mixture including the ears of an ass, the face of a deer or kangaroo, the body of a pig, huge clawed feet and longish kangaroo tail—now installed in the Berlin Zoo.

2. A simultaneous earthquake and volcanic eruption caused destruction and terror in the island of Stromboli the most northern of the Linpari group north of Sicily.

Photo shows an excellent view of Stromboli in eruption in 1912 which gives a good idea of the present catastrophe.

3. Serg. Larry C. Gentner, Grants Pass, Ore., whose phenomenal shooting won the historic Wimbledon Cup, contested for by U. S. riflemen since 1871, at the National Rifle and Pistol Matches at Camp Perry, Ohio.

He hit the bull's-eye 20 times at a 1,000 yards and ten of these shots were in dead center. The bull's-eye of above target appears about an inch in diameter at 1,000 yards.

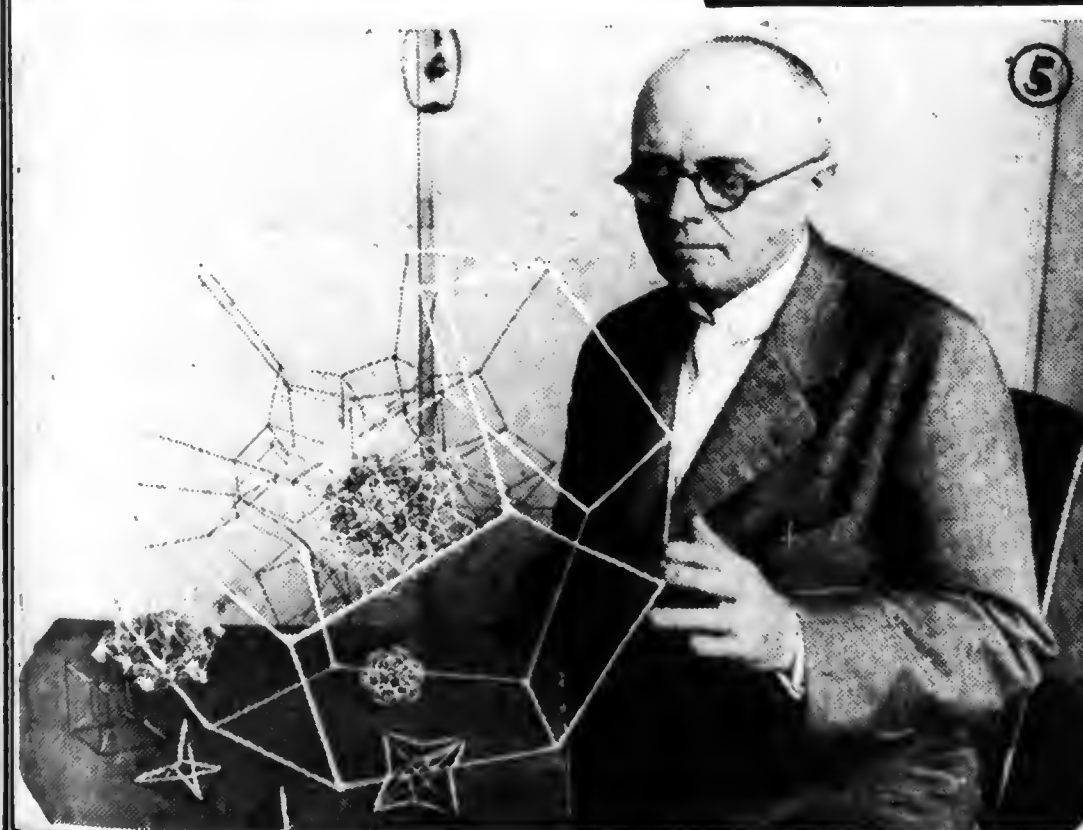
4. Miss Elsie H. Martens, of California, a noted authority in the education of backward children has been appointed by the Bureau of Education of the Interior Department to be Chief of a new division which will specialize in the problems of educating such children.

5. An unusual and striking series of models intended to illustrate the little known fourth dimension, have just been completed by Dr. Paul R. Heyl, distinguished scientist of the Bureau of Standards at Washington, who recently attained much attention by weighing the earth.

6. The world's largest camera, weighing with associated equipment three and one-half tons and taking a picture three feet square, is in daily use by the United States Geological Survey at Washington.



④



⑤



⑥

HAVE YOU WON A PRIZE?

OTTER is going to be a busy month for the Young People. On page you know is written almost entirely by the readers who are awarded prizes for all published material in answer to our contests. Perhaps you will find your name here some of these days—so send anything you think will be of interest to the other readers. Here are some new contests where you can all show your skill:

1. Free-hand drawing of your own home.
2. Poster on Kindness to Animals.
3. Write an unfinished story.
4. Short essay on "Things I Wish My Mother or Father Would Do."
5. Short poem on Fall.
6. Drawing for the Little Folks to color.

Three prizes for each contest. Send your contributions immediately to Young People's Editor, Pennsylvania Farmer, 7300 Penn. Ave., Pittsburgh, Pa.



David Warfield, Jr.

held at Kansas City as a feature of the American Royal Livestock Show. The following states were represented in the regional contest at Springfield: Ohio, Maryland, New Jersey, New York, Massachusetts, Connecticut, New Hampshire, Maine, Rhode Island and Pennsylvania.

The five regional contests in the United States, as well as the national contest, are held under the direction of the Federal Board for Vocational Education and sponsored by the Capper Farm Papers. In addition to having all expenses paid to the national contest at Kansas City, David will receive fifty dollars from the East-

To be continued

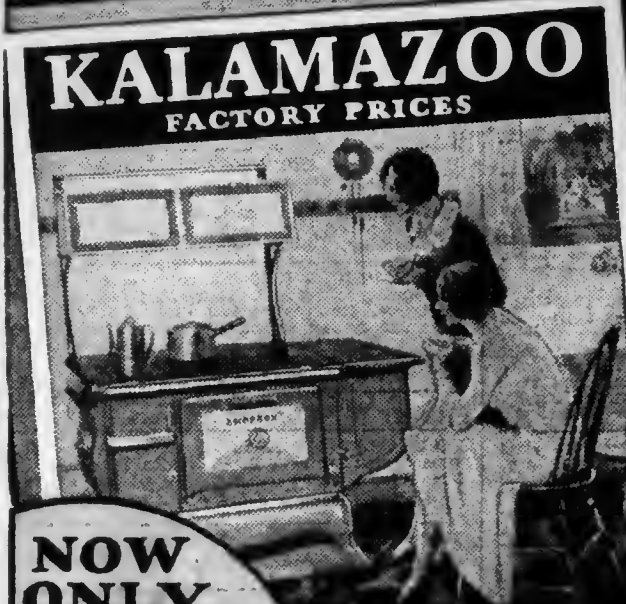
By Leet

Amazing
HEATER

BARGAINS

from the NEW, FREE
KALAMAZOO
BOOK

Send for it
Today

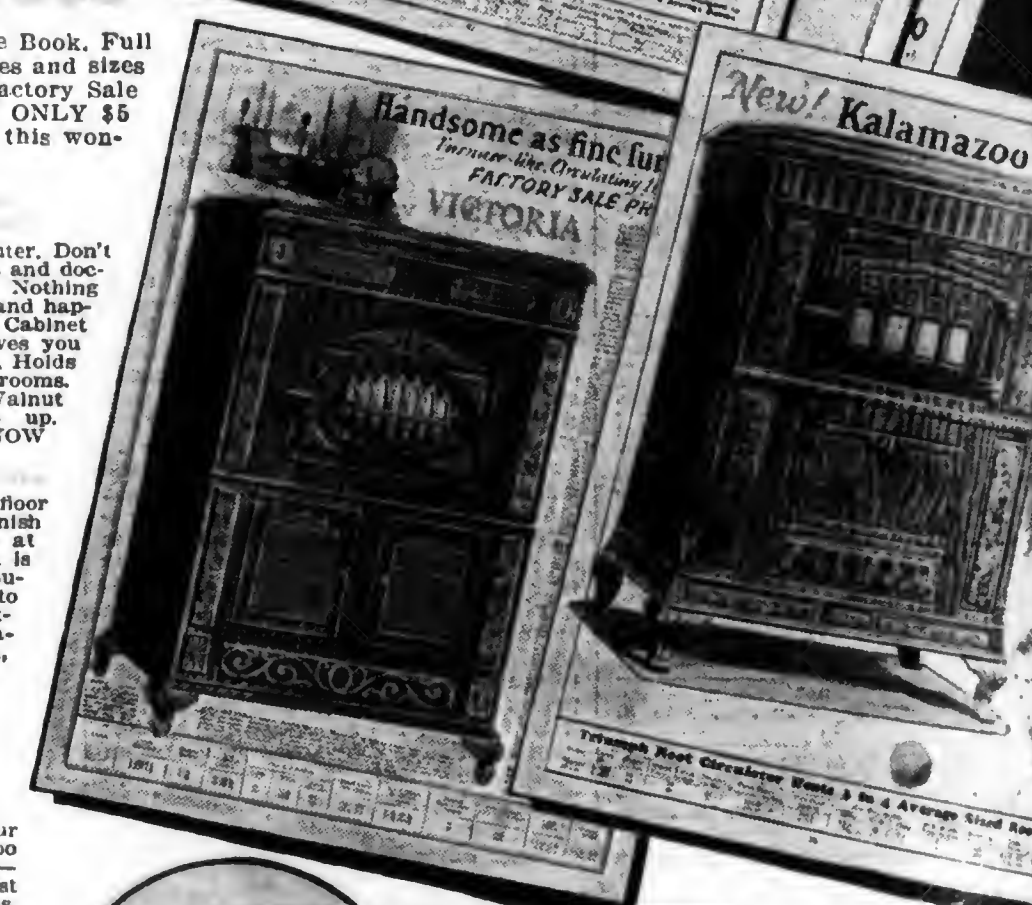


NOW ONLY \$5 DOWN
ON ANY
STOVE or
FURNACE

Still Easier Terms
A Kalamazoo
Direct to You



Cabinet
Heaters
\$38.25
up



New, Free, from the press... Kalamazoo's 30th Anniversary Sale Book. Full of surprises—sparkling with color—alive with NEW features! 200 styles and sizes of Quality Stoves, Ranges, and Furnaces—bigger values than ever—Factory Sale Prices that save you 10 to 20%. And a brand NEW Credit Policy—NOW ONLY \$5 DOWN on any Stove or Furnace regardless of price or size. Write for this wonderful NEW FREE Book Now!

A wide variety of Cabinet Heaters—the NEWEST styles, in Black and in rich, Walnut Porcelain Enamel finishes. Bargains that will open your eyes. Quality unbeatable. Don't order a Cabinet Heater until you receive this NEW Book and compare Kalamazoo Quality, Terms and Prices with others. Look through the Furnace Section, too. NEW improvements—easiest terms.

Modern Coal and Wood Ranges, and Combination Coal and Gas Ranges, in gleaming, colorful Porcelain Enamel. (Your choice of 5 beautiful colors—Pearl Gray, Delft Blue, Ivory Tan, Nile Green, Ebony Black). NEW gas stoves, NEW gas ranges, and NEW oil ranges—all in fascinating colors. Also Washing Machines, Refrigerators, Kitchen Cabinets, Vacuum Cleaners and other Household Goods—all at big savings. You simply can't afford to be without this Book—it's the best friend your pocket-book ever had.

Mail coupon TODAY! This sensational NEW FREE Anniversary Book has more bargains than 29 big stores—a thrill on every page for thrifty families. 750,000 satisfied customers have saved 10 to 20% by buying direct from the factory. Factory prices are always lowest. There's nothing between you and Kalamazoo but the railroad tracks. Kalamazoo terms are NOW easier than ever before—some as low as \$3 down, \$3 monthly—and a YEAR TO PAY. No stove or furnace over \$5 down. Kalamazoo gives you 30 days' FREE TRIAL in your home. 569 days' Approval Test, a 5-Year Guarantee on materials and workmanship, a \$100,000 Bank Bond Guarantee of satisfaction.

Kalamazoo is close to you—all stoves and ranges shipped within 24 hours from Kalamazoo, Michigan, or factory branch in Utica, New York. Furnaces in 18 hours. No delay. Safe delivery guaranteed.

Where's your pocket? Slip the coupon NOW, and mail today. Modernize your kitchen with a colorful Kalamazoo Range—as easy to clean as a china dish. Brighten your home—lighten your work. All Kalamazoo Ranges are approved by Good Housekeeping Institute.

"This is to be you know that the Kalamazoo heater reaching here in good condition and in good time. This stove proves to be all that one can wish for in a good heater. We are very much pleased with it and satisfied in every way." George W. Fitch.

Don't shiver through another winter. Don't subject your family to winter ills and doctor bills—that's poor economy. Nothing will bring you so much comfort and happiness as a NEW Kalamazoo Cabinet Heater. Built like a furnace. Gives you healthful circulation of warm air. Holds fire overnight. Heats 2 to 6 rooms. Your choice of Black or Walnut Porcelain Enamel—only \$38.25 up. And just think, you can order NOW for only \$5 down.

Send us a rough sketch of the floor plan of your home. We'll furnish you FREE plans—no obligation at all. We'll show you how easy it is to install your own furnace—thousands have. You can save \$40 to \$60 on a Kalamazoo furnace. Exclusive Kalamazoo furnace features are Hot-Blast Firepot, new ring type Radiator, easy shaking Grates, upright Shaker. You can order on the easiest of terms—this NEW Book gives you full information.

You have heard of Kalamazoo Quality for 30 years. Kalamazoo stoves and ranges are built in our big 12 acre factory. Kalamazoo has tremendous buying power—that means purchasing the best raw materials at lowest prices. Big scale production enables us to manufacture efficiently at extremely low cost. By selling direct from factory to you, eliminating entirely all "in-between" profits, you get absolutely rock-bottom factory prices. Understand you buy from a factory—not from a mail order house, a wholesale house, or a retail house. You get lowest Factory Prices.

KALAMAZOO STOVE CO.
Manufacturers
141 Rochester Ave., Kalamazoo, Mich.
Warehousing and shipping points, Utica, N. Y., and Kalamazoo, Mich. (Write only to Kalamazoo)

North East, Pa.—"Your Classic Heater has been received. The stove is certainly a wonder and satisfactory in every way. It is a wonderful heater and heater." J. A. DeCorte.

Mail
Coupon
Today

750,000 satisfied customers have saved 10 to 20% by buying direct from the factory.

Cabinet Heaters	<input type="checkbox"/>	Important: Be sure to put an (X) in column at left to indicate articles in which you are interested.
Coal and Wood Ranges	<input type="checkbox"/>	
Gas & Combination Ranges	<input type="checkbox"/>	
Gasoline Ranges	<input type="checkbox"/>	
Pipe Furnaces	<input type="checkbox"/>	
Direct Heat Furnaces	<input type="checkbox"/>	
Oil Stoves	<input type="checkbox"/>	
Household Goods	<input type="checkbox"/>	

Name.....
(Please print name plainly)

Address.....

City..... State.....

PENNSYLVANIA FARMER

Published Weekly

Established 1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

October 11, 1930



Philadelphia

Pittsburgh

Harrisburg

Your Wheat will bring MORE On the Hoof

AT present prices, you will make more money by grinding and feeding your wheat instead of selling it!

Illinois College of Agriculture says: "Ground wheat is worth as much as the same weight of shelled corn for hogs and sometimes gives better results than corn." Kansas State Agriculture College reports that a bushel of ground wheat is worth 10% more as feed than a bushel of corn and that wheat has the same nutritive value for hogs, beef cattle, horses and sheep.

Grinding Lowers Cost of Any Feed

Experimental Station tests prove that the value of small grains like wheat may be increased 25% by grinding. Ground wheat at \$1.00 a bushel would prove to be as economical as whole wheat at 75 cents.

Whether you plan to feed wheat or other grains you will cut feed costs and build up steers or milk flow by grinding all your grains

and roughage with a Papec Hammer-Type Grinder.

Papec rapidly grinds anything with 10-20 tractor or similar power. Papec's automatic governor feed control does away with hand feeding and keeps the grinder running at full capacity.

If you are interested in cheaper feed—and who isn't—send for our free Grinder booklet. Tells how to get more money from feeding crops. It's FREE. Write today.

PAPEC MACHINE CO.

7810 N. Main St.
Shortsville, N. Y.

Feed and Rough-
age Grinders

Ensilage Cutters
Hay Choppers

G-18



GRIND THE FEED YOU GROW



CAN YOU
AFFORD NOT
TO USE A

"NON-WRAP" SPREADER

The best and cheapest fertilizer is manure if applied evenly. The Farquhar "Non-Wrap" Spreader makes the most even distribution of any kind or condition of manure. Positively will not wrap—convenient to load and easy draft. Has many special features long desired by the progressive farmer.

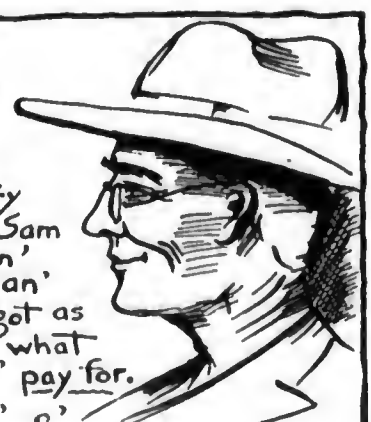
Investigate the strong features of the "Non-Wrap" Spreader.

Ask for New Bulletin No. 930

A. B. FARQUHAR CO., Limited, Box 946, York, Pa.
Engines — Boilers — Cider Presses — Sawmills — Potato Diggers

NEIGHBOR DAVE SAYS—

My friend Bill says one o' th' troubles o' this country is that folks like shiftless Sam Smith—that don't own nothin'—but a second hand flivver an' a couple rabbit dogs—is got as much vote as Bill has—an' what Sam votes for Bill has got t' pay for. But Bill does his own pickin', o' th' kind o' roof an' fence he pays for. He picks Leadclad Fence, an' Leadclad Special Farm Roofing, for he knows th' thick, heavy coatin' o' lead makes 'em last, an' Bill knows he's gettin' what he pays for. Th' coat o' lead is seven times as heavy as th' coatin' on th' ordinary kind. Write in tonight an' get th' free catalogue. Address Neighbor Dave, at th' Leadclad Wire Co., Mountville, W. Va.



Farm Facts and Fancies

By ALVA AGEE

THE minimum risk in life, as far as making sure of a living is concerned, is taken by the owner of what is sometimes called the "family farm." If he owns it outright he is pretty apt not to become involved in debt. The farm usually is small, and it may not be very productive, but it solves the problem of plenty to eat, something to wear and a place to sleep, and with millions of people there is uncertainty on those scores. Employers have the say, or the public from which they must extract a living, but the owner of the family farm is pretty secure. There is work, and if management is good there is an assured living. I wish there were so many millions of such farms that there would not be room for a single ten-thousand-acre wheat farm.

Russia

Our parlor socialists, and some others who do not like the existing order of things, praise Russia. It is hard to learn the truth about conditions there, because the great mass of people are very ignorant and helpless and those in charge of affairs are very shrewd. Doubtless many of them are sincere. They want to make the world over in their way. Their need of money compels them to treat the peasant population as serfs, and a leading project today is the use of their labor and of American machinery to produce wheat enough to feed all Europe. They have the land, and they have the soldiers to keep the peasants from eating the wheat, and the exports should soon provide the gold the government needs so badly.

It is entirely possible that within three years Russia can add many hundreds of millions of bushels of wheat to the present world supply, and the government can undersell all other countries. If they can maintain control, using the boundless land resources and the millions of workers, they can convert wheat into the gold they need, and at the same time create unrest in other countries that need a market for their wheat.

At the First Table

When the farm land in some sections of southern Europe was held in immense estates there was much wheat for export. After the War a great deal of this land was distributed to the peasants who formerly had worked for the landlords. In some cases about as much wheat was produced, but exports fell off for the very good reason that the peasants preferred to eat the wheat themselves. They had been confined to corn and other coarse grains when they worked under others, and now they were free to eat what they raised. Of course they need the money the wheat would bring when exported, but that is their business, and one likes to think of their eating at the first table when they do the work. This sort of thing is taking place on many farms in this country that are not run profitably from a money point of view. The owners eat the best they produce, and eat as free men should. It is a worth-while liberty.

The Constitution

The radio and the newspapers enable any man who has plenty of money to reach tens of millions of Americans with his views of what the country should do. Politicians know that prohibition is a political issue that can influence more votes one way or the other than any other issue because it makes a direct personal appeal. The national Constitution cannot be amended without the approval of two-thirds of the states. I wonder whether any one really believes that it is not easy to name over one-third of our states that could not be brought to vote for striking out the prohibition amendment. The

question is not one of personal preference, but beyond reasonable doubt this group will not change its purpose of retaining the amendment. Doubtless the group is far larger.

Midget Golf

We reasoned that there must be something in midget golf that was not apparent to one sitting in a car by the side of a course and watching others. Otherwise, how account for the craze? So we invested fifty cents in two tickets for a game. The manager looked us over, seemingly decided that we would need encouragement to become enthusiasts, and went around with us. He inclined to undercount our scores for the holes, praised our shots without cause, and did his full duty. When we were through, we still were puzzled. At the same time we tried to be fair enough to see that the fault may not have lain with this game, and probably did not, because hundreds of thousands are giving time and money to it. It takes enthusiasm to make a go of anything, and it was our misfortune to find that lacking. If we had been more expert, enthusiasm on a midget scale might have been stirred.

Quarantines

The New Jersey Department of Agriculture has issued an interesting circular containing a study of the economic cost of quarantine against the Japanese beetle. The conclusion is: "All present indications would seem to be strongly in favor of the conclusion that the economic importance, measured in terms of damage to crops and other valuable property and cost of control of the insects under consideration has been seriously exaggerated. Such an exaggeration has resulted in establishing a fear complex among persons unfamiliar with the insects and their habits, which greatly enhances the difficulty of obtaining revision of the quarantine regulations based on known facts."

It was my duty for many years to help secure the funds and enforce this quarantine when it was evident that the beetle was bound to spread wherever conditions favored it. I have seen it fly from the top of a tree to another tree a hundred feet away, and extermination was out of the question. Nurserymen pointed out the huge losses they were suffering from quarantine restriction, but the only thing to do was to enforce the regulations. Our activity helped to produce the "fear complex" in outside districts that furnished the natural markets for the region. Over a million dollars has been expended within the state in this quarantine work, and the beetle is still moving into a great area outside of the state, and one problem now is to reduce the "fear complex."

Thistle Cutting Day

IN driving through some parts of western Pennsylvania one cannot but note the great numbers of thistles going to seed; not scores, but hundreds of them, in pasture fields and along the roadsides. They are unsightly. Cows cannot eat the grass around them. They will not even use the big plants to brush the flies off their sides and legs. "Fisties are too jagged," as the little five-year-old boy said.

Why not have "thistle cutting day" next year and every year, when every farmer will drop all other work and cut every thistle on his farm and along any road bordering his land and thus help rid the community and county of this weed? Latter part of June or early July will be in time to keep seed from ripening and also catch plants late coming through the ground. Come on! Let's battle the thistles and prove we are the victors. Peggy Short.

The Firestone Dealer Will Save You Money

BY TAKING immediate advantage of the low prices now being quoted by the Firestone Dealer in your community, you can save money on tires. He has joined with Firestone in cutting costs—reducing his overhead and selling expenses—and because of the large volume of business which he does at a very small profit per sale, he is able to sell you for less money.

PATENTED
DOUBLE
CORD
BREAKER



**6 PLYS
UNDER THE
TREAD**

Firestone

OLDFIELD

	Our Tire (Cash Price)	Mail Order Tire
4.40-21.....	\$5.55	\$5.55
4.50-21.....	6.35	6.35
4.75-19.....	7.55	7.55
5.00-20.....	8.15	8.15
5.25-18.....	8.98	8.98
5.25-21.....	9.75	9.75
6.00-20, 6-ply	12.55	12.90

Other Sizes Proportionately Low

H. D. TRUCK TIRES

30x5.....	19.45	19.45
32x6.....	34.10	34.10

Firestone

BATTERIES

13-Plate Sentinel.....	\$8.95
---------------------------	--------

Less \$1.00 for Your Old Battery

Firestone's lower manufacturing and distributing costs permit substantial savings which are passed on to you through Firestone's 24,000 dealers who get their tires direct from nearby Firestone warehouses. This vast army of Firestone Dealers are always on the ground and are equipped to give the kind of service that motorists need and deserve.

Double Guarantee

Every Firestone Tire bears the name "Firestone" for your protection and is fully guaranteed by us and the dealer who sells it. Added to this is the fact that Firestone Tires hold all world records on road and track for speed, safety, endurance and mileage.

Know Exactly what you buy

Your Firestone Dealer will show you cross sections of Firestone and other tires. You can easily compare construction and value and recognize Firestone advantages.

Compare Construction and Value

4.50-21	Our Tire	Mail Order Tire
Rubber Volume.....	165 cu. in.	150 cu. in.
Weight.....	16.80 lbs.	15.68 lbs.
Width.....	4.75 in.	4.72 in.
Ply at Tread.....	6 plies	5 plies
Cords per Inch.....	25.5 cords	24 cords
Price.....	\$6.35	\$6.35

Come in and examine the Tire Sections—the Facts speak for themselves

A "Special Brand" tire is made by some unknown manufacturer and sold under a name that does not identify him to the public, usually because he builds his "first grade" tires under his own name.

PATENTED
DOUBLE
CORD
BREAKER



**8 PLYS
UNDER THE
TREAD**

Firestone

ANCHOR
Super Heavy Duty

	Our Tire (Cash Price)	Mail Order Tire
4.50-21.....	\$9.20	\$9.75
4.75-19.....	10.20	10.25
5.00-19.....	10.95	11.75
5.25-20.....	12.35	13.65
5.50-20.....	13.90	15.15
6.00-20.....	14.70	17.10
6.50-19.....	17.40	18.95
7.00-20.....	19.05	23.45

Other Sizes Proportionately Low

Firestone

COURIER

	Our Tire (Cash Price)	Mail Order Tire
30x3 1/2.....	\$4.20	\$4.20
4.40-21.....	4.79	4.79
4.50-21.....	5.35	5.35

See the FIRESTONE DEALER and Save Money

Ask Him for Copy of the FIRESTONE COOPERATIVE CATALOG

DELLINGER MILLS

Priced as Low as \$110.00

F.O.B. Lancaster, Pa.



In Sizes
to
Operate with
7½ to
40 H. P.

Furnished with or without
Automatic Feed Rolls and
Governor.

Write for catalogue.

A. M. DELLINGER, Lancaster, Pa.

Genuine ALLIGATOR
STEEL BELT LACING
Kills Two Birds with One Stone

Correct Mechanically
A smooth joint of
great strength.
Used by makers of
belting and farm
equipment and
millions of
farmers.

Look for the
Famous Alligator
Trade Mark

Just a Hammer to
Apply It

Saves
Belt Troubles
Seals trouble-
some belt ends
in a cinched, vise-like grip.
"Never Let Go." Ask for "Handy
Package" of two 6-in. joints.

Your Dealer Sells It

THE AMERICAN OIL & PAINT CO.
QUALITY OILS
ROOF
SAVERS

Charles H. Spangle, Angola, Ind.,
says: "I paid my taxes this fall
with the difference in price of a
new roof and what I paid for
American Liquid Roof Cement."
A coat of this cement on an old
roof will save you many dollars.
We manufacture and sell this
cement direct.

Write for literature.
THE AMERICAN OIL & PAINT CO.
9916 Harvard Avenue, Cleveland, Ohio
A few County Representatives invited. Write
for book—"Making Money the American Way."

Representative Wanted!

A most unusual opportunity now
open for live wire men who have
wide acquaintance among farmers
and who are willing to work all or
spare time. An opportunity to build
up a profitable and permanent busi-
ness as District Representative for
a complete line of farm seeds. This
company is an old reliable concern
(favorably known throughout the
East and liberally advertised. Rep-
resentatives are given every assist-
ance possible with complete sales
outlets. Start early. Write today
for full information. Address
Box 171, Pennsylvania Farmer,
Pittsburgh, Pa.

NESHAMINY GARDENS

By R. P. KESTER

ANOTHER season of so-called agricultural fairs is closing. I have watched the metamorphosis of fairs during the past twenty-five years. I have seen them pass from a huge county picnic where everybody went to enjoy a day of visiting and competing to a place where revelers and chance-takers predominate. Men, women and children began preparations for the fair months in advance by producing something to place in competition at the fall fair, and when the gates were thrown open to the public there was on display the best that the farms and households could produce. But not any more.

However, there is nothing to be gained by making "odious comparisons." The world has moved—people say onward—and habits of mind and act have changed. I have tried to keep up in thought and spirit; but when I mingle with a present-day fair crowd, and view everything that is presented in the way of display and entertainment, I sometimes wonder whether I have not missed a step or two in the march "onward."

But there are yet left many interesting and valuable things. The manufacturers of farm and household equipment usually have a display at the fairs which is always instructive and entertaining. If one who can remember such exhibits of twenty-five or more years ago will compare them with what is to be found at fairs today, he will readily see why one man on a farm now can do as much work in production as two or three could do formerly. It matters not whether the work be harvesting, potato digging, plowing, milking, or what not, machines are now available which more than take the place of the millions of farm people who have left the farms to engage in something else. And in the home fitting and furnishing lines! Not one of the hundreds of things in this line I viewed at the fair yesterday was in the little home, where I was raised, or anywhere else for that matter, in the "good old days."

Some of us are trying to work up public sentiment in our county to the point where concerted action may be enlisted in the fight against the Japanese beetle. So far, only spasmodic and individual efforts have been made. It is time for the state to take some action other than furnishing a small army of "inspectors" to stop people on the highways and ask them whether they are carrying any beetle food. That will never eliminate the pest, nor even stop its spread. Unless some unforeseen event takes place the Japanese beetle will be found, eventually, wherever there is any food it will eat, and it seems that it will eat almost anything if driven to it.

The experiments and investigations which the government experts have carried on have evolved certain remedies which will control the beetle if universally practiced. Scientific investigation has solved equally hard problems in the past. In every instance with one exception—the chestnut tree blight—applied knowledge has won. The potato bug, the San Jose scale, and numberless plant diseases and insects have been brought under control. But these things have come under control only as farmers and gardeners faithfully have put into practice the findings of the scientists. But so far, there has been no intelligent, concerted action on the part of

the public with regard to the Japanese beetle. Yet I believe it will be no harder to control in a practical way than have been some of the other pests. But it will not be done by confiscating lettuce sandwiches!

When my family read my note two weeks ago stating that, "when our families shall foregather now there will be nine of us instead of the original four," I got laughed out of court. As a matter of mathematical accuracy there will be eleven! Just which two were left out of the original calculation is not known. But in order to partly re-establish myself in the family as an inflexible authority (sic), I make this correction.

Every time I brag about something here that Mrs. Kester does or makes I am deluged with inquiries asking how she does it. The last thing was my mention of the excellent grape juice she makes. Probably it will be too late by the time this is read for it to be worth while to publish the recipe here, but I should have done it at first. I have answered an unknown number of letters in regard to it, and this I was glad to do.

Friendly Talks

By
Edgar L.
Vincent

IT is easy to see wrinkles where there are none. A good woman thought the seat of a nice leather-bottomed chair, standing on the porch was spoiled by deep wrinkles, but when she came to rub her hand over the leather not a sign of a wrinkle was there. What she saw was simply the shadows made by the sun shining through some bushes a little way off.

Wrinkles where there are none. How often we see them in all sorts of places. "This is going to be a terrible day," a farmer mourned at sunrise. Looking ahead he saw a thousand hard things in his way, but at night he confessed, "I got through the day a good deal better than I expected." And that is usually the case. The spectres we think we are going to see don't materialize.

A great many shadowy wrinkles appear to us because we are all the time looking for them and expecting them to spoil our brightest prospects. In mid summer we worry because the prospects for our crops seem poor. Harvest time brings us all we have a right to expect. We worry because we do not see how we are going to get the hay done. Help is scarce and high-priced; but things always turn out better than we expected. The right man comes along and we put the hay all in the barn in good shape.

What's the use of looking for wrinkles on the chair bottom, or anywhere else? We make ourselves miserable and we worry everybody about us with our constant stewing about evils that do not overtake us. More than that, we shorten our lives by fretting unnecessarily.

"How can I help it?" That is my disposition." Then kick that disposition out of the back door and set the dog on it. Then begin over. Look for the best. Work for the best. Expect the best, and the best will come. Never lie awake nights because you are afraid you will have bad dreams. Think right during the daytime and your dreams will not fail to be sweet. Give up looking for the wrinkles!

A WONDERFUL FEED

Nothing can equal DRIED BEET PULP

It's the most wonderful supplemental feed known for promoting and maintaining health of animals, thereby increasing milk production in dairy cows and producing rapid profitable gains with beef cattle and sheep.

Yet it does not add to the cost of the ration. It supplements pasture, replaces silage, corn and other carbohydrate feeds. Where hay is short or high priced six pounds of Beet Pulp will do the work of ten pounds of hay, and do it better.

No other feed has such unique health building properties. It is light, bulky, cooling, palatable, laxative. Not only highly digestible itself, it also aids the digestion of other feeds. "Off-feed" days are eliminated.

Low Prices in Effect

Dried Beet Pulp is always profitable to feed but now with the present low prices you certainly should avail yourself of its advantages. Feed it—you'll see immediately how your profits increase.

Dried Beet Pulp which results from the extraction of sugar from beets is the only vegetable feed available in commercial form. Can be delivered anywhere in the United States. Ask your dealer.

Write us for free booklet "Profitable Feeding."

The Larrowe Milling Co.
Dept. P. F.-1
Detroit, Mich.

What Kept Byrd's Men Warm?

The
Old Reliable

Brown's Beach Jacket

This snug-fitting jacket will keep you warm and comfortable whether you are hunting, camping, motor-ing or working on the farm. Made of strong windproof knit cloth with knit-in wool fleece lining. Wears like iron and can be washed without losing its shape. Three styles—coat with or without collar, and vest.

Ask your dealer
BROWN'S BEACH JACKET COMPANY
Worcester, Massachusetts

A FEW MEN WITH CARS WANTED AT ONCE

I can use a few more men with cars, fair education, who are honest, reliable, and who are willing to work all or spare time. An opportunity to build up a profitable and permanent business as District Representative for a complete line of farm seeds. This company is an old reliable concern (favorably known throughout the East and liberally advertised. Representatives are given every assistance possible with complete sales outlets. Start early. Write today for full information. Address Box 171, Pennsylvania Farmer, Pittsburgh, Pa.

MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

PENNSYLVANIA FARMER

Published Weekly

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER
Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa.,
under the Act of March 3, 1879.

President - - - Arthur Capper
Vice-President - - T. D. Harman
Vice-President - George M. Slocum
Editor-in-Chief - - E. S. Bayard
Manager - - - Neff Laing

New York - - - 420 Lexington Ave.
Chicago - - - 203 No. Wabash Ave.
Detroit - - - 1632 W. Lafayette Blvd.
Philadelphia - - 1201 Chestnut St.
Cleveland - - - 1011 Rockwell Ave.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

No. 103

Pittsburgh, Pa., October 11, 1930

No. 15

What Will Potatoes Bring This Winter?

By W. R. WHITACRE

THE potato crop this year is short and prospects for those growers who have potatoes are bright. It is too early to prophesy what potato prices will be, but the per capita production based on the September 1st crop estimate report is 2.75 bushels and is the lightest on record. In 1925 when the per capita supply was 2.78 bushels the price soared to \$5 per hundred pounds.

This does not mean that prices will reach \$5 per season and there seems to be more uncertainty as to what the market will do than in previous years. One indication of this is the lack of speculative interest in the face of the September report. The price of potatoes late in September was around 50c a hundred pounds below that which prevailed at the same time last year.

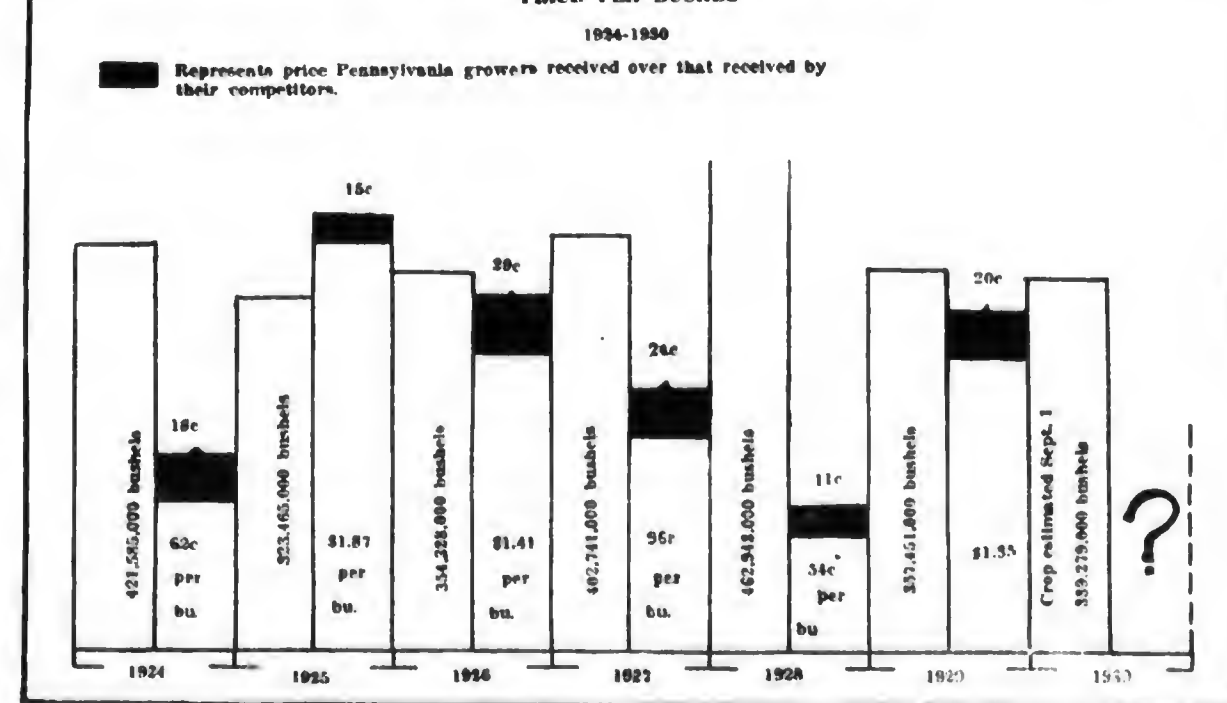
It is difficult to account for this low level, but part of it was due to the larger crop in the immediate states. Last year the New Jersey crop was small and had been marketed by the first of September, in fact there were less than 50 cars shipped from this state during the early part of the month. This year New Jersey shipped 730 cars during the first two weeks of September and, since the season overlaps the start of the marketing period for late potatoes, it is only natural that the supply of New Jersey potatoes influences price.

Perhaps another cause for the lack of speculative demand is the fact that dealers have had a hard time to make a profit on late potatoes in recent years and it is likely that this along with the uncertainty that exists has made them more cautious. Dealers and growers are wondering how the industrial depression will affect the potato market. There are some who believe that economic conditions will reduce the demand, while others argue that potatoes are a cheap food and the working man will continue to buy them even though prices advance. It is likely that there will be good demand for potatoes as long as the price does not go too high, for then consumption will be cut off and the cheaper potato substitutes will be used. This means that economic conditions will probably act as a brake and that prices will not rise high as they would with the same production in a more prosperous year.

The lack of rainfall this past summer was spectacular and the drought was the most severe since 1911. The lack of moisture combined with the hot weather was responsible for the low yields in most potato states. The production for the entire United States was estimated at 339,278,000 bushels according to the September report, compared with 359,796,000 bushels in 1925. This figure includes a large quantity of early potatoes which have already been consumed.

Late Eastern States
The eastern late states of Maine, New York and Pennsylvania have a crop of 88,000 bushels, or 12,105,000 bushels short of last year. New York has a larger crop of 70,000 and Pennsylvania 6,900,000. The central states of Ohio, Michigan, Wisconsin, Minnesota, North Dakota and Nebraska have a shortage of 14,290,000 bushels, while the west states of Idaho, Colorado, California, Oregon and Montana have 7,033,000 bushels more than last year and a half million more in the five-year average.

A COMPARISON OF PRODUCTION AND AVERAGE FARM PRICE PER BUSHEL



Cash and Lambs

The Club Hípico de Santiago is a successful business corporation as well as a promoter of sport and equine development. It pays dividends of about 20 per cent per annum in cash and extra dividends of a lamb or part of a lamb at intervals. For the increase of the flock which keeps the grass in order is divided among the stockholders. Though these lamb dividends are not so

(Continued on page 21.)

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published every Sunday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
T. D. HARMAN, Vice-President
GEORGE M. SLOCUM, Vice-President
NEFF LAING, Manager

EDITORIAL STAFF
E. S. BAYARD, Editor-in-Chief
C. L. WHITE, Editor
MILES HORST, Field Editor

Editorial Office: PITTSBURGH, HARRISBURG, PHILADELPHIA
Contributing Editors: R. P. Ketter, Alva Agee, L. W. Lighty, W. D. Zinn,
H. V. Blasingame, J. F. Shigley, F. L. Bentley, J. G. Lipman,
S. W. Fletcher, H. C. Kandel, A. A. Borland,
R. L. Scharringhausen, Gilbert S. Watts,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR.
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square inch per week, or \$14.00 per inch each insertion.
Minimum space 5 lines. Special rates on application for
live stock and classified advertising. No deceptive, immoral or
swindling advertisement inserted at any price.

Member Agricultural Publishers' Association,
Audit Bureau of Circulations

Volume 503, No. 15

Established 1877

TIMELY BULLETIN

THE United States Department of Agriculture has just issued a bulletin which deserves special notice at this time. It is known as Miscellaneous Publication No. 96, and it tells how to feed wheat to livestock. It may be obtained free by applying to the Department of Agriculture or to the Federal Farm Board, both at Washington, D. C.

BOUYANCY OF BLUEGRASS

UNUSUAL seasons bring to light unexpected traits of various plants. One of the most noticeable is the quick response of drought-tricken bluegrass to a little moisture. Parched pastures shed that grey and lifeless coat for one of cheerful living green following a few showers. The high regard in which stockmen have held bluegrass is justified by the behavior of the plant this year.

REAL CAUSE OF FIRES

THIS is National Fire Prevention Week, so designated by presidential proclamation. The average rural citizen may fittingly celebrate by looking for the fire hazards on his own place. Most farm fires are started by lightning, defective chimneys and flues, carelessness with matches, smoking, sparks on combustible roofs, spontaneous combustion. According to the statisticians these are the principal causes of the fires that took 3,500 human lives and destroyed a hundred million dollars worth of farm property in this country last year. But, going beyond the statisticians, the real cause of all fires is this: Nobody expects a fire on his own property.

IDENTIFY THEM

POLICE officers identify law-breaking motorists by taking down their license numbers and consulting lists prepared by highway officials. Some farmers don't realize that they may learn the names of trespassers and other undesirables by the same method. The identity of automobile owners may be obtained by sending the license numbers to the State Department of Highways at the capital. A letter of warning to offenders is often preferable to more drastic action and just as effective. The ordinary marauder loses his arrogance when he realizes that his license plates are really signs bearing his name and address.

CATTLE PROSPECTS

THIS is clean-up time in the cattle business, when everything that can't be wintered or finished comes to market. With a

short corn crop and a limited demand for feeder cattle a large proportion of the receipts will go to slaughter, which means an abundant supply of ordinary beef until the grassers are out of the way. Supplies of fed cattle the coming season can hardly be up to normal, no matter how much oats, barley and wheat is fed, and better markets are likely after the fall run is over. It appears now that this will be a good winter to feed cattle. Also that it will be a good time to winter them for the purpose of finishing on grass next year. Those who have the material to do either of these things are not likely to regret it if they carry on as usual.

APPLE AND POTATO SHOW

THE 1930 apple and potato show at Pittsburgh promises to be as successful as its predecessors. Frank Shaffer of the Pittsburgh Chamber of Commerce announces that 200 exhibitors, representing 66 counties in Pennsylvania, West Virginia and Ohio, will take part in the event, which is scheduled for October 29-31. The show is staged to demonstrate to consumers the high quality of apples and potatoes that can be grown in this territory. In addition it may demonstrate the advantages of our diversified climate which, in spite of all the unkind things said about it, permits 66 counties to aspire to show honors in an unfavorable season.

WHERE CHAMPIONS MEET

THE National Dairy Exposition at St. Louis opens October 11 and runs through the following week. Entries of pure-bred dairy cattle number 1,081, including 334 Holsteins, 326 Jerseys, 202 Guernseys, 132 Brown Swisses and 87 Ayrshires—the cream of the country's breeding herds. In addition to this great array of blood are 250 pure-bred heifers which the club boys and girls have entered. Every important dairy state or region is represented, and so is every branch of the industry in one way or another. Those who want to see the real basis of our great dairy industry will not be disappointed at St. Louis, and they may study also everything connected with the business.

IMPORTANT DECISION

DURING the past year we have received several requests, some of them amounting to a demand, to publish the decision of an Iowa court in relation to the plan whereby many states are trying to eradicate bovine tuberculosis. That decision was widely quoted by opponents of this movement as the final authority on the subject, whereas it was merely the ruling of a lower court and in conflict with other decisions. Recently the case has come before the Iowa supreme court, and its decision must be accepted as final. The supreme court upholds the law and the system, reversing the much-quoted lower court in all important points. Let those who want to quote the courts on this question look up the Iowa decision in what is known as the Mitchell county cattle case. There is not much comfort in it for those who oppose the plan by which tuberculosis is being reduced and may be finally eradicated.

CHARACTER CREDIT

THIS is a time when men should deal with each other with due allowance for the difficulties imposed by weather and business conditions. Whether in town or in country, whether farmers or business men or workers, there are many who are honest and competent yet in need of patience and consideration on the part of those to whom they have financial obligations. Many who have built up their credit are now learning something about the value of a good name in business.

And many who neglected their credit are in position to learn a lesson which will prove valuable in the future if heeded. In one dry state a committee proposes to help those who need credit by so-called character loans, or loans based on character rather than on assets. That has been tested in other cases and the losses have been very small. They will be in this case, for character is the foundation of credit at any time.

PLENTY OF LABOR

LAST spring we stated that there was no shortage of farm labor; that for the first time in years we had received more letters from men who wanted work than from farmers who wanted help. Several readers then wrote asking for farm workers, and we came to the summer months with about as many applications for help as requests for jobs. This fall we have had more inquiries for work than for men to work on farms. In fact inquiries for men have been few. In our issue of September 27 a West Virginia farmer carried a 22-word advertisement for a man able to run a tractor and ready to go to work October 1st. On October 2nd we had for this advertiser 212 replies and several telephone and office calls besides. If anybody needs farm help all he has to do is to send in a small advertisement and he will get in touch with many who want to work in the country. Some of these are now in the country, laid off by farmers who are trying to reduce labor costs, and some are in towns and cities. There is plenty of farm labor now—plenty of nearly all kinds of labor, in fact.

SUPPLIES OF FEED

THAT capable statistician Nat C. Murray makes some interesting estimates and comparisons in regard to feed grains this year and the number of animals to be fed. He finds that the total production of feed grains, including corn, oats, barley and the kafirs, is 86,992,000 tons this year against an average of 109,425,000 tons for the ten years just past. Production of hay this year is 94,137,000 tons against a ten-year average of 107,378,000 tons. The number of animals, according to official estimates, is 91 per cent of the past ten-year average. Counting the average relation of feed to livestock during the past ten years as 100 Mr. Murray finds that this year's relation of grain is 87, and the relation of all feed is 91. From this it appears that so far as subsistence is concerned the supply of feed will be nearer normal than we have considered it in view of the great shortage of corn, and any use of wheat will bring it closer to normal than the above figures indicate. But corn is the country's main source of finished meat animals, and the relation of corn to livestock is only 69—which suggests a serious shortage in the total supply of meats.

Mr. Murray makes no estimate of the quantity of wheat likely to be fed, or of the quantity which will be used in finishing animals for market. He reports that at 565 -nation-quoting both wheat and corn the last week of September the average country price of wheat was 68c per bushel and the average country price of corn 80c per bushel. At 520 of these stations corn was higher than wheat, the exceptions being largely in southern regions. Such a relation of prices can mean only one thing if it is maintained and if livestock markets promise to pay for any grain—extensive feeding of wheat. We still feel that the amount of wheat to be fed is being underestimated in the mind of our statisticians, but that is merely an opinion unsupported by evidence. No evidence can be had in such a case, but when wheat is so much cheaper than corn extensive feeding is natural.

New Jersey Farm Comment

By G. W. HARRIS

DROUTH has reduced the yield of South Jersey second-crop seed to less than one-half the normal crop. The 250 Central Jersey potato growers who visited the South Jersey fields last Tuesday are disappointed in the fact that only about 7,000 bags of this seed will be available to them this fall, as compared to 15,000 to 20,000 sacks during the past two seasons. South Jersey second-crop seed has given results comparable, if not better, to seed imported from Prince Edward Island, with the result that more and more of the Central Jersey growers are looking to the South Jersey growers for their seed sources. The short crop this year means that many of these growers will be unable to secure the seed they desire. Reports are that Virginia and Maryland will ship no certified seed this fall and that the Maine crop is badly diseased. This means that growers will depend almost entirely on Prince Edward Island seed for their next year's crop of potatoes.

The growers who visited six second-crop fields in Salem and Cumberland counties were told by Dr. Wm. Martin that the South Jersey fields were practically free from disease and that this year none of the fields required roguing. Two years ago the second-crop men made a selection of seven disease-free fields in Prince Edward Island from which they since have secured their seed, with the result that their crop has been exceptionally clean and free from disease.

THE visit to South Jersey was sponsored by the Kandle Seed Potato Club, an organized group of seed potato growers who produce nearly two-thirds of the total of 540 acres of seed potatoes in South Jersey this season. This organization has contracted with two Central Jersey dealers to handle their entire Central Jersey seed sales this fall with the price to the buyer to be the same as that for Prince Edward Island seed delivered. As yet the price has not been established.

This agreement was brought about after a series of years of holding for high prices and price cutting among the seed growers which proved very unsatisfactory to both the grower and the purchaser. It is the hope of the Kandle Seed Potato Club that by selling through only two dealers a stable price may be established for the second-crop seed. In any normal season such an agreement would probably be welcomed by the Central Jersey potato men, but the short crop has inspired many fears and rumors from those who have been going to South Jersey to buy their seed in the past, and this in turn is reflected among the club members. There will not be enough seed for all who want it, that is definitely known. Whether or not this unexpected factor will tend to bring dissonance among the seed producers and disorganize them depends on the far-sightedness of the individuals.

Selling individually might prove profitable to the growers this particular season, but normal crops with price cutting and holding may be expected in future years. The Kandle Seed Potato Club members realize that if any large volume of second-crop seed is to be purchased by Central Jersey growers in the future a more uniform price for this seed must be established. It was with this in mind that they contracted with Chamberlin and Barclay at Cranbury and Rooney and Ely at Englishtown to handle all their seed for this season.

FARMERS from all over the state are urged to attend the annual legislative conference which is being held at Trenton on October 20 under the auspices of the State Grange and the Federated County Boards of Agriculture. At this meeting in the Hotel Sterling, starting at 10:30 a. m., the farm legislative program for 1931 will be discussed. This conference offers every farmer in the state an opportunity to air his views on certain bills affecting agriculture which may or may not be presented to the legislature. As the program for the coming year will be determined here all rural groups should take an active interest in this meeting.

THE army worm has made its destructive appearance in some parts of Central and South Jersey. A large part of the injury has been to cover crops and grain fields, in some instances cover crops have necessarily been reseeded.

In Burlington county County Agent Thompson has discovered some alfalfa fields injured by the

army worm, the first invasion by this pest during his nine and one-half years in the county. He states that it is very improbable that destruction by this worm will continue after cold weather sets in, or that there will be a re-occurrence of injury in the spring.

THE Cook-Voorhees Soil Science Foundation of the New Jersey Agricultural Experiment Station, established in 1928 to widen the scope of the institution's investigations in soils, now totals nearly \$25,000 in contributions from residents in New Jersey.

The foundation was started by Dr. J. G. Lipman, dean of the Agricultural College, with the \$1,250 Chilean Nitrate of Soda Award he received in 1928 in recognition of his investigations on the relative efficiency of different nitrogenous fertilizers. The soil science foundation is named in honor of Dr. George H. Cook and Dr. E. B. Voorhees, first

talk on "The Effects of Business on Agriculture."

The various methods of marketing fruits and vegetables, and the extent to which they can be profitably utilized in New Jersey, will be the theme of the institute program on the first day. Discussions will be held on roadside markets, auction markets, farmers' and city markets, shipping point sales, shipping on consignment, cooperative associations, farmers' capital organizations and on farm sales to hucksters. For each of these different methods of marketing an authority on the subject will be selected to speak.

This day should prove very profitable to all those who are able to attend the meeting as all these different marketing methods are in vogue in New Jersey at the present time. A method of marketing which one group of farmers in one section of the state may find profitable may prove unsatisfactory to others, but in the discussion of these methods many new ideas of value will be brought to attention.

Poultry and egg marketing will be discussed on the second day of the institute. Hunterdon county and Toms River poultrymen have something new to offer this group in the way of marketing eggs. These two groups established auction egg markets this year which are proving very successful. Last month the Hunterdon county group sold 1,170 cases of eggs at auction in Flemington, the gross sales totaling \$15,677.30. One hundred forty-six producers are now members of the Flemington Auction Market Association and have received prices for their eggs considerably above New York top quotations. The statement has been made that the establishment of this market has increased the price of every case of eggs sold in Hunterdon county by at least 50 cents.

On the third day milk and dairy products will be under consideration. This should prove of particular interest to New Jersey dairymen in view of the present discussion of the proposed state grades for milk. Farmers' purchasing organizations will occupy a place on the program of the final day of the institution.

NATIONAL Fire Prevention Week being observed this week brings to our attention that fires on New Jersey farms cost their owners nearly a million dollars annually. An average of eight farm fires occur each week in the state.

Most farm fires are preventable, while many others by the aid of simple fire-fighting equipment could be extinguished in their earlier stages. As lightning has been found to be the leading cause of farm fires, proper installation of lightning rods on buildings should be observed.

Mops and oil-soaked rags and waste materials should never be piled in corners and out-of-the-way places, for they are likely to ignite spontaneously. Extreme care should be taken where oil lamps are used.

Damp, uncured hay in barn has been responsible for a number of New Jersey farm fires. Should it seem necessary to place damp hay in the barn, it should not be placed against dry hay, which it would tend to ignite. Twenty pounds of coarse salt strewn over each ton of hay will not only make it more palatable for livestock, but will to some extent prevent heating.

In observing fire prevention throughout the year the Department of Agriculture urges farmers to keep buckets of water, or of sand, and chemical fire extinguishers in all farm buildings to facilitate the extinguishing of fires as soon as they break out.

REDUCED rates from this territory to the National Dairy Exposition have been granted by railroads. The rate of a fare and a half for the round trip on the certificate plan will prevail. It may be obtained by buying a one-way ticket and at the same time securing a validation certificate. This certificate must be validated at the Exposition offices in St. Louis, when a return ticket will be sold at half fare. Date of sale, October, 8-14; return limit, October 22. The Exposition will be held at St. Louis, October 11-19.



Another Robber Gang

Low Prices and Farm Readjustment

By GEO. F. JOHNSON

FROM 1889 to 1899 farmers in Pennsylvania experienced the lowest level of prices for agricultural products for any ten-year period in the past century. The average December 1 price received by farmers during this decade for each of the principal field crops was: wheat, 77c; corn, 47c; oats, 34c; buckwheat, 50c; potatoes, 53c; and hay, \$10.85.

It is interesting to note how this decade of low prices affected the type of agriculture carried on in the state, since for 30 years farmers had experienced much higher prices. In the first place, the decline in prices during the 80's and early 90's hit Pennsylvania agriculture at its point of maximum expansion which, of course, is the logical thing to expect, excepting that the expansion continued for 20 years after the price level began to fall and the peak of the expansion was reached at the bottom of the fall in prices.

Fewer Acres, Yield Higher

There was more land in the principal field crops in Pennsylvania in 1890 than ever before, or ever since, in the history of the state. Under such conditions, the efforts of Pennsylvania farmers to maintain a profitable agriculture and to avoid the abandonment of the less productive soil have few equals for courage and fortitude in the annals of American agricultural history.

Of perhaps greatest interest is the fact that between 1889 and 1899 farmers increased their wheat acreage ten per cent and the average yield per acre three bushels. (These figures are based on a nine-year average centering on 1889 compared with a nine-year average centering on 1899.) All the reasons for this increased acreage are not clear, since it was the general impression at the time that the expansion in grain acreage throughout the world had been an important factor in the low prices. The need for immediate cash, the necessity of maintaining a definite crop rotation, the great stress placed on wheat straw as bedding for livestock, and the increasing use of wheat and wheat products as feed for chickens and dairy cows undoubtedly were partly responsible for the increase.

The corn acreage was reduced slightly but here again the average acre yield was increased four bushels. The barley acreage was cut in half while the buckwheat area remained unchanged except that the yield was increased 4.5 bushels per acre. The acreage of oats was reduced approximately 100,000 but the acre yield was 3.6 bushels higher. The rye acreage was cut approximately 50,000 acres but the yield was increased 4.3 bushels per acre. One of the largest cuts was in hay acreage; it was decreased approximately 250,000 but the yield was increased slightly. The area growing potatoes was increased a little while the acre yield was increased ten bushels.

Readjustments in the barnyard were even more striking. The number of beef cattle was reduced by 117,000 and the number of sheep by

173,000. There were 13,000 fewer horses but 12,000 more mules. There were approximately 50,000 more milk cows and the annual production per cow was increased by 200 gallons of milk. The number of laying hens and pullets was increased 650,000 and the annual egg production per hen was boosted eight eggs. In all, there was a reduction on farms of around 185,000, or six per cent, in number of animal units based on feed requirements and likewise a cut of approximately 400,000 acres, or six per cent, in area devoted to the principal feed crops—corn, oats, barley, rye and hay.

The increased production per acre occurring in several of the important crops during the decade was probably due to several factors. The annual expenditure for commercial fertilizer increased from \$3,384,310 in 1889 to \$4,685,920 in 1899 and the investment in farm machinery was expanded during the period. It is also worthy of mention that the period surrounding 1890 was one in which more livestock was kept per farm than ever before or ever since. This, with the great emphasis placed on farm manure as a fertilizer, undoubtedly aided an increase of acre yields.

A very significant fact is: Greater improvement in the yields of principal field crops was made during the period from (Continued on page 24.)

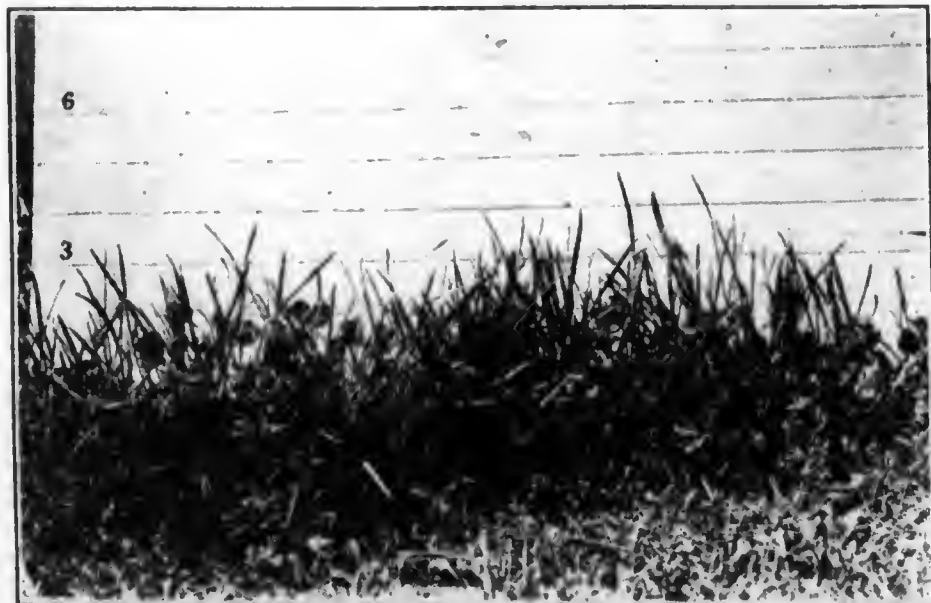
Help for Short Pasture

By E. K. WALRATH

THE Robertson Farms, York county, Pa., know now that their high-producing Holsteins can produce milk cheaper on fertilized pasture. Mr. H. E. Robertson, the owner, decided early this spring to fertilize a part of his 13-acre bluegrass pasture. To do this a temporary fence was built. On March 26th 3.9 acres were top-dressed with 600 pounds per acre of a 7-6-5 fertilizer. The other 8.9 acres in the pasture were not fertilized.



Part of Mr. H. E. Robertson's Holstein herd on fertilized pasture treated at the rate of 600 pounds of a 7-6-5 fertilizer per acre. Lindsey Peacock, herdsman, kept accurate records of the test, including milk, feed and time animals grazed on both treated and untreated land.



No line or stakes were necessary on April 30th to mark the 4,875 pounds yield of green grass on this land which received 600 pounds per acre of 7-6-5 fertilizer applied on March 26th.



Thin stand and little stretch marked this unfertilized pasture on April 30th. The yield of green grass was 2,408 pounds, compared with 4,875 pounds from 600 pounds of 7-6-5 fertilizer at this early date.

On April 30th sample areas were cut on each pasture. The fertilized pasture had double the weight of green grass. Mr. Robertson had predicted this result by the greater thickness and height of the fertilized bluegrass and white clover. The scales more than confirmed his judgment.

Thirty-nine of the highest producing Holstein cows on the farm were turned onto the fertilized pasture on May 8th, or eleven days before the unfertilized pasture was ready for grazing. This early grazing saved some expensive barn feeding and went a long way toward the cost of the fertilizer.

During April and May these pastures, though so much different in acreage, gave about the same amount of grazing. The drouth in July told a different story. The unfertilized pasture gave only four days grazing, but that with complete fertilizer held on for nineteen days until the summer pasture was ready. The fertilized pasture gave 468 cow pasture days against 104 cow days for the unfertilized field.

Effect on Production

That all this pasture on the Robertson Farms is far above the average was shown when it supported one and one-half cows per acre from May 8th until July 23rd, without fertilizer treatment. The fertilized pasture, at a cost of \$11.40 per acre for complete fertilizer, supported an average of four and one-half cows per acre, or three times the number of milk cows per acre.

During this time the 3.9 acres of fertilized pasture produced 887.5 gallons more milk than the 8.9 acres without fertilizer treatment, at a saving above feed costs of \$186.97.

Mr. Robertson noticed a decided difference in the color of the two pastures during the severe drouth in August. A few heifers and two mules also knew which was the better. They were put in the check or unfertilized plot but broke through the fence. The grass on the other side was greener.

On September first the cows were returned to the fertilized pasture that had made a rapid growth following a light shower. Feed and milk records were kept until October, and then submitted to the National Fertilizer Association. The Robertson Farms entered a pasture fertilization contest in competition with dairymen from Maryland and Pennsylvania. Regardless of the outcome in this contest, Mr. Robertson agrees that this year's experience has shown him the value of several common sense principles of pasture management:

(1) That commercial dairymen with high producing herds can afford to use the best land on the farm for permanent pasture;

(2) That dividing the pasture and alternating grazing with a period of rest produces more and better pasture;

(3) That "it is cheaper to grow feed on a fertilized pasture and send the cows after it, than to grow it on cropland and send a man or team after it, or buy it in bags."

The Skokums of the Allegash

By Holman F. Day

Copyright, 1907, by Perry Mason Company, Boston, Mass.

AT last Doody rose and dumped a handful of shining coins into a wooden box, stretched himself with a mighty yawn, and declared that he was hungry. In the zeal of their labor they had been many hours without food.

"We've got to keep goin', Lud," declared the red-bearded man. "It's always been night work here, you know. It will never do to have smoke trailin' into the sky daytimes. These timber inspectors are keepin' a sharp eye out for wood fires this time o' year, and we don't want 'em mousin' round here."

"There's enough metal in the pot for an hour," said the man at the caldron. "I'll go up to camp and bring the grub here."

"Pass in something to the ring-tailed tiger, and let him with a club if he tries to get out," directed Doody, as the man hurried away.

Shain still kept his watch in the tree. In the first place, his curiosity held him there. Above all, he wanted to know how the news of his escape would be received and what plans the men would make to pursue him. With that information in his possession, he felt that he would be able to shape his own course better.

His excitement equalled that of the little group below him when the messenger came floundering down into the valley fifteen minutes later, gasping. "Your tiger's gone, Doody! Busted out and gone!"

And he stammered a description of the drawn staple, the open door, and the bar thrown over against the wheel.

"But he didn't have a namable thing in his pockets," the old man kept repeating, while the others cursed his lack of precautions. "I've got his knife in my pocket, and he couldn't have thrown over that bar of himself! How could he have done it?"

"I don't know and I don't care!" raged the red-bearded man. "He's gone, ain't he? You don't know how much he's guessed about us and this place! You don't know but what he may be a government spy. You've pulled all this trouble onto us, Doody. But it ain't no use to stand here and swap talk. We've got to get our stuff out of here. It's all got to be moved, for I tell you he's goin' to come back with marshals at his heels."

There were more recriminations, and then the head, as the red-bearded man expressed it, "got down to business." The conference was spirited, and their tones loud enough to reach the ears of the eavesdropper posted in the hillside spruce.

Doody was to start at once with as much of the finished money and metal as his horses could haul, and was to take it to what the counterfeiter called "the Potlatch." Shain gathered that this locality was another of their haunts, and was so far away that Doody could not return for a day or more. In the meantime the three men were to dismantle the stamp, and get ready for the next haul when Doody should return.

"It isn't too far to move!" roared the red-bearded man at Doody's faltering objections. "We've got to make a big jump. Malloy and the men are due tomorrow or next day, and we'll all be here waitin' for you. What we can't haul out trip we'll pack on our backs, and your ring-tailed tiger can bring in all the marshals he wants to after that. We'll have the stuff ready and lie in wait in the bush till we see your cart. You're the chances, you say? Well, you brought on the trouble, didn't you? Then it's up to you to lift the big end now."

The result of the colloquy was that Doody, with the man to help him harness and load the boxes of finished coin, started away toward camp, silent and sullen. The others went on with their labor again.

It was an easy matter for Shain to trail the two men, for they carried a lantern. The young man's decision was formed when he saw Doody start. There was only one way for him to escape from the woods, and that was to follow the van out to the highway. To get away—that was his only thought, and further than that he made no plans.

The harnessing and the loading were quickly performed, for Doody was evidently determined to make as much of his trip as possible under cover of darkness. The man lighted the way across the clearing, going ahead with the lantern, and once in the wood road, told Doody to let the horses have their heads and they would bring him through all right.

Shain, treading softly and keeping outside the circle of the lantern-light, followed; and after the man had returned to the camp, he took up his way along the road, plodding slowly and guided by the rumble of the van and the rattling of the tires against the stones.

It was a weary and tedious way along the winding road. There were many stops, so that the little horses might breathe; and the young man huddled behind a tree for fear that the keen eyes of the old woodman would spy him. But when the cart moved on he walked fearlessly, for the noise of the vehicle along the rocky way was loud in the

silences of the night. Sometimes he even went close behind the van. He noted that the hump and padlock had not been refastened. The bar was thrown across the doors.

As Shain surveyed the prison where he had suffered such tortures, and as he reflected that the old man doubtless had meditated even more desperate measures, so that he might assure himself that he would not be betrayed, his anger flamed once more. He had been cajoled from honest employment, seduced into signing away the pay that he had so painfully earned in the chill and wet of the spring, and now was abandoned in a strange country with no money or food. And the old wretch riding ahead there was responsible for it all, he reflected, gritting his teeth.

Men who have performed brave deeds suddenly, men who have devised big schemes without reflection beforehand, have related that inanimate objects have often suggested their course of action.

Several "shorts" sacks were thrown on the top of the van, and the corner of one hung down within easy reach of Shain, tramping close to the doors. He looked at it for a while, reflected, clutching his hands and sinking his fingers into his palms. Then suddenly, arriving at his resolution, he seized the bar and threw it over upon the wheel, against the tire of which it rested, grating loudly as the wheel revolved.

The ear of Doody instantly detected the trouble, and he shouted to the horses and yanked them to a standstill.

"I knowed this road was rough," Shain heard him muttering as he climbed down, "but I ain't seen any jounce that would throw that bar over! That's twice it has done that trick today without hands a-touchin' it, for you needn't tell me that feller ever done that by himself."

He had reached the ground and was coming toward the rear of the vehicle.

"If there is any such thing as a ha'nt," he went on, "I should—"

The next moment he had yet more reason to believe in spirits of the materialized sort. As he turned the corner Shain leaped at him, dragged the short sack violently down over his head and shoulders, tripped him, and fell heavily upon him. In that moment Doody was too frightened to resist. His fall knocked the breath out of him, and he groaned dismally.

Bonneted as he was, his arms helpless, he allowed the young man to hoist him like a sack of meal and thrust him into the van, the doors of which swung open. He began to resist now, at last, but a few vigorous punches from the unseen assailant drove him in. Shain banged the doors shut, dropped the bar, fumbled in the road, and scraped up two stones. With the larger rock he drove the smaller into the slot above the bar.

"Now," he panted, "some one else will play ring-tailed tiger for a while!" And paying no heed to the muffled shouts and appeals within, he mounted the box, clucked to the willing horses, and drove the van on.

WHEN Doody's first fright and astonishment were over, he was shrewd enough to guess who his captor was. The heavy boxes of coin occupied but little room in the interior, and he was able to crawl forward and cry his lament very nearly under the seat.

But the young man had no reply to make. He drove along steadily, allowing the animals to follow the road.

When the morning glowed red over the treetops he came into the turnpike at the well-remembered spot of his capture. There was no mistaking the return road for many miles, for there was but the one turnpike through the woods. There were brooks to furnish the water for the horses, and

when he judged the hour to be near noon, he was able to supply their other wants. He came in sight of a farmer's house in a good-sized clearing, and drove along past it, to leave his horses under the shade of some roadside trees.

Then he walked to the house, a building without clapboards and innocent of shingles. He carried one of the empty sacks on his arm, and offered the French-Canadian farmer, awaiting his approach on his door-step, some of his scanty store of silver for a "baiting" of hay and a loaf of bread.

The habitant hospitably invited him to bring his horses to the hovel-barn and to sit at table with the family; and when Shain rather lamely stammered excuses and pleaded his hurry, the farmer stuffed his sack with fodder and loaded bacon and bread into the hook of his arm, refusing all recompense.

"I don't have everythin' w'at I want maself," he said, with a grin, and pointing to the half-finished house, "but I don't take de monee off a mans w'at hongree. Yo' go 'long and welcom' to you."

One other thing did the farmer give Shain that was almost as welcome as the food and the fodder. On his happening to mention that he was bound for Ubal Cyr's place, he told him of a branch road, or cut-off, that would take him across country, and save him many miles of the roundabout river, or Daigle road.

Shain fed his horses in a quiet bit of woods and munched his own food with more or less contentment. He would no more have opened those rear doors on that old man growling within than he would have unbarred the cage of a Bengal tiger. But he took a big rock, split a board on top of the van, and through the crack dropped down chunks of meat and bits of bread.

Then he drove on. The cut-off road was sparsely settled, and he met few persons. It was in the gray of another dawn that he topped the hill above the river and saw Ubal Cyr's tavern, with its huddle of little buildings about it, like chicks round a hen. He was quivering with excitement when he drove his horses into the yard. Their shaggy heads dropped, sweat and dust streaked their sides; they stumbled at almost every step with weariness.

To his surprise, the yard was full of bustle, even at that early hour. Men were lined along the dirt banking, talking eagerly or peering through the low windows into the main room. The arrival of the van was hardly noticed.

AS Shain crawled stiffly down from his seat, Ubal Cyr appeared on the threshold. He was quivering with excitement, and even he hardly gave the young man more than passing notice.

"Soho, M'sieu' Sirols!" he cried. "Yo' have gone onto dat peddle business, eh? Wal, yo' not find moeh tr-rade on dis place today. Nossir! Dere ban too gre't t'ings happen. We all too excite to tr-rade."

Then running forward to the cart, he cried: "Präps yo' ain't hear de news, eh? Dere come t'ree deppity marshal down de reever, jus' de sam' as dere ban t'ree deppity marshals gone op de reever, and w'at yo' tink, dey cotch dem Salter mans and hees friends between 'em lak dat!" He slapped his palms together. "Dat Salter mans he ban look over hees shoulaire all tam, as yo' might say, and he not t'ink about dem t'ree deppity marshal dat come down de reever. Ha' ha!" It was evident that the sympathies of Ubal were not with Salter's woes.

"And dey geet t'ree odder mans with him! Dat's right!" cried the host, in conclusion. "And dey all ban in my beeg room dere, and M'sieu' John Flanders he ban look at dem and set on heem chair with hees leg stretch out, and rub hees hand and say, 'Dat's a ver' good deppity marshals!'"

The young man dropped his reins and ran to the open door of the tavern.

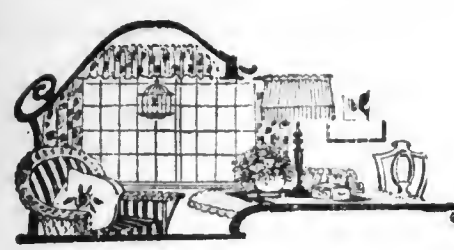
In the center of the room sat Fighting John, his wounded leg supported by another chair, on his face an expression of grim delight.

Four men, handcuffed each to each, were ranged before him on a "deacons' seat." Behind these lounged several men, among whom Shain recognized the persons he had seen up the Allegash through the screen of the alder bushes. Among the prisoners he saw three of the men who had held the conference beside Dirty Donald's bateau. The fourth was the individual who had sobbed his wail to him that night from the canoe, dimly seen then in the dusk, but recognized now as Shain stared at him.

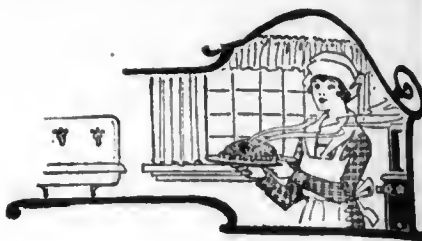
"I tell you, men," Flanders was saying while he thumped his fist on his chair rail, "your whole gang is in for it this time, and you can't evade it. I've always played fair with you fellows. I've met you in the open. I know you all; I know your style. Now, Salter, you didn't shoot me to save a few pounds of opium or because you were too drunk to know what you were doing."

The men trembled and looked away. "There's some one in this game that's bigger than you are," the deputy went on. "Now what did you dump from your canoes when the boys here caught you?"

(To be continued.)



The Farm Home



October Culls Make Tasty Dishes

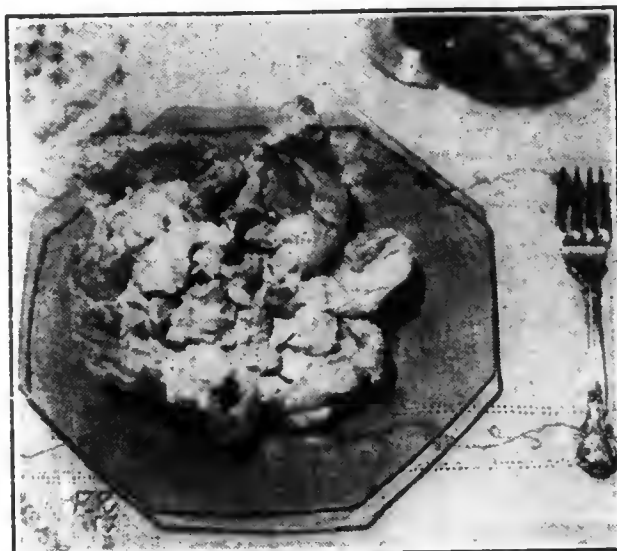
By GERTRUDE S. STEWART

EVERY poultry yard has at least a few slow-growing fowls that may never become good laying pullets nor fine Thanksgiving roasts. This is the very time to look them over and work them up into dishes to grace the "king's table."

You may have been too busy when we wrote previously about trying this year to can some chicken. If you were, it is not too late, and we have another supply of printed instructions for all who want help. (Send a self-addressed stamped envelope with your request.)

Many women prefer to can only the very choice pieces. Bony sections take up considerable room in the jars. It is well, however, to keep plenty of space for heat circulation in the jar, and a few bones furnish just such a break among heavy breasts, etc.

The extra bones are stripped of meat and used in many dishes, one of which we suggest for your next choice salad. This recipe is from the U. S. Bureau of Home Economics and is the very best chicken salad I have ever tasted.



Try chicken salad for your next surprise on the family.

Delicious Chicken Salad

Five pounds chicken, three bunches celery, one cup mild vinegar, one sliced onion, salt, mayonnaise dressing, lettuce.

Simmer the chicken until tender in a small quantity of water. When about half done, add a teaspoon of salt. Let the chicken cool in the broth. After it is cold remove the skin, strip the meat from the bones, and cut it into small pieces of even size. In the meantime allow a few slices of onion to soak in a cup of mild vinegar to give the vinegar a slight onion flavor. Remove a cup of chicken fat from the cold broth and mix with this vinegar. Pour this mixture over the chicken, adding more salt and vinegar if needed to season it well. A few drops of tabasco improves it. Let this stand, or marinate, for several hours, overnight.

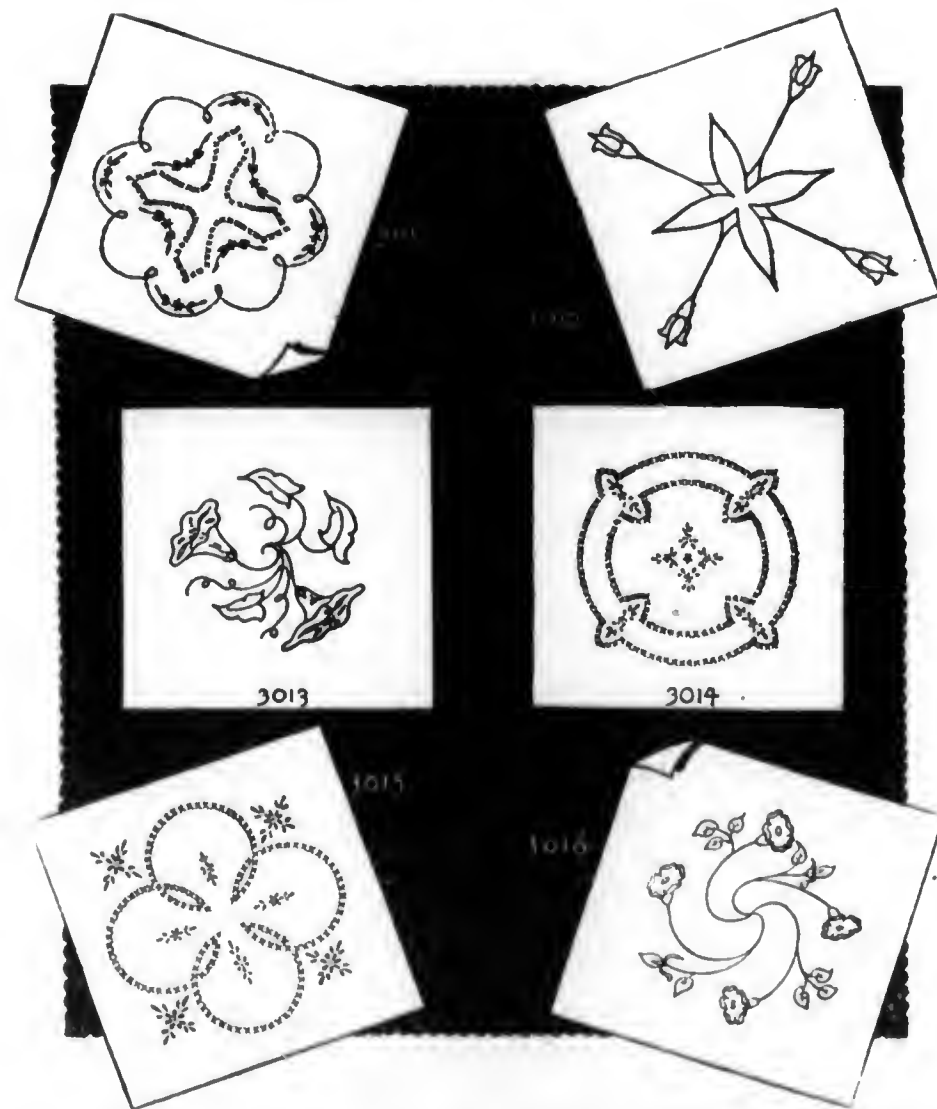
Cut the celery stalks and some of the tender leaves into small pieces and let stand in a cold place until crisp. Mix enough thick, well-seasoned mayonnaise dressing with the chicken to coat the pieces well. Shortly before the salad is to be served, add the celery and more mayonnaise if needed. Stir the mixture lightly so as not to break up the chicken. Add still more salt if needed. Pile the salad lightly on crisp lettuce and serve at once.

Casserole of Chicken Wings and Eggplant

If you want a new casserole dish, save out the wings and backs the next time you cut up chickens to fry or can and combine them with eggplant. These few pieces will never be missed from the platter of fried chicken, and they will be enough to give savory flavor to the eggplant and make another substantial dinner dish. The Bureau of Home Economics suggests this recipe:

Chicken wings and bony pieces, one medium-sized eggplant, pared and diced, salt, pepper, flour, fat, one cup chopped green pepper, one-half cup chopped onion, water.

Wings of young chickens and pieces too bony to fry successfully are excellent prepared in this way. Salt the chicken, roll in flour, brown lightly in fat in a skillet, and transfer to a casserole. Cook the eggplant, green pepper and onion in the fat for about ten minutes, season to taste and add to the chicken in the casserole. Rinse out the skillet with one-half cup of hot water, pour over the chicken and vegetables, cover and cook in a moderately hot oven (375 F.) for about one hour.



Patchwork Quilt Blocks

MOST truly American of all feminine arts is patchwork, which had its origin with the first Colonial settlers, in the days when ingenious women who cherished home and family expressed their hopes, aims and ideas as well as love of beauty. We have originated six new designs which are most striking. These are stamped on fine quality white embroidery cloth, size 18x18 inches, and we are able to furnish as well the fast color star cloth in rose, blue or lavender for completely finishing top of quilt size 90x90 inches.

A quilt this size will require twelve of the stamped white blocks and three of the star cloth. A 28-inch size with sleeves and in whatever color desired. Price of the quilt blocks Nos. 3011 to 3016, ordered singly, is 15c each, one-half dozen 60c, one dozen \$1.00. Three and one-half additional yards of the colored star cloth for the entire quilt is \$1.65 or \$2.65 for all of the material necessary.

Send your order to Embroidery Department, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.

make the underskirt of heavy material all the way to the waist; instead, put a deep band in a foundation of light weight silk or mercerized cotton, which is less bulky.

There are tunics of all lengths shown this season. Every one of them permits the lengthening of an old skirt by setting a yoke at the top which will be covered by the skirt of the tunic. A green wool might be worn with a green velvet Russian blouse. If your left-over happens to be black, wine, brown or even blue, you will have little difficulty in matching it to velvet, which is inexpensive and fashionable. Catherine Griebel, N. J. State College of Agriculture.

Fall and Winter Fashion Book

The new Fashion Book will be a help to you in renovating those old dresses. Send ten cents to Pattern Department, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.

Typhoid--A Lurking Menace

AT this season of the year city health departments and all organized agencies for public health send out warning of typhoid fever, the menace that lurks in polluted water and milk supplies.

Each year nearly 82,000 persons in the United States and Canada have typhoid fever, and about 8,200 die of it.

Typhoid is now preventable. It is more rare in the United States Army than in the most healthful cities and towns. This is because all soldiers in the Army are vaccinated against typhoid fever.

When the contents of poorly constructed privy vaults and sewers and human discharges, left on the ground, drain into water systems they may infect the water supply with typhoid fever germs which may be taken into the body with drinking water or with water used in preparing uncooked foods. Many typhoid epidemics are caused in this way. Where there is an efficient system of water purification, typhoid has greatly decreased.

Typhoid fever germs thrive in milk through carelessness or lack of cleanliness on the part of those who handle it. Flies sometimes infect milk which is left uncovered. Pasteurized milk which is kept covered in a cool place is safe milk, for pasteurization kills typhoid germs.

Remember—typhoid fever can be controlled by the use of pure water, pasteurized milk and clean foods; by the proper disposal of sewage; careful screening against flies; by destruction of the fly and its breeding places and by the general practice of anti-typhoid vaccination.

If an epidemic threatens a community the people rush for vaccination. Again this proves the truth of the saying "An ounce of prevention is worth a pound of cure." Why wait to be frightened into vaccination?

R. G. Beachley, M. D., Dr. P. H. and Neil C. Westcott.



Frocks Can Be Made at a Saving

No. 6881—Ladies' dress with slender hips. Cut in eight sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 40-inch size with long sleeves requires 5 1/2 yards of 38-inch material. Price 15c or two for 25c.

No. 6883—Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires 3 1/2 yards of material 39 inches wide. The yoke, jabot, godets and belt of contrasting material require 1 1/2 yards of contrasting material. Price 15c or two for 25c.

No. 6882—Girls' dress. Cut in three sizes: 4, 6 and 8 years. A 4-year size requires 2 1/2 yards of material 35 inches wide. For collar and sleeve bands of contrasting material 1 yard 32 inches wide is required, cut crosswise. Price 15c or two for 25c.

No. 6884—Ladies' morning frock. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; and extra large, 46-48 inches bust measure. A medium size requires 3 1/2 yards of 38-inch material. Price 15c or two for 25c.

No. 6885—Ladies' dress. Cut in five sizes: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size with sleeves and collar requires 4 1/2 yards of material 34 inches wide. Without sleeves and collar it requires 3 yards. Price 15c or two for 25c.

No. 6886—Children's rompers. Cut in three sizes: 6 months, 1 and 2 years. A 2-year size requires 2 1/2 yards of material 34 inches wide. Without sleeves 1 1/2 yards is required. Price 15c or two for 25c.

No. 6887—Ladies' slip. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2 1/2 yards of 38-inch material. To finish the lower edge with lace requires 2 1/2 yards. To finish with bias binding requires 2 1/2 yards 1 1/2 inches wide. Price 15c or two for 25c.

No. 6888—Boys' suit. Cut in three sizes: 2, 4 and 6 years. A 2-year size with short sleeves requires 1 1/2 yards of 36-inch material together with 1/2 yard of contrasting material. Price 15c or two for 25c.

No. 6889—Girls' dress. Cut in five sizes: 1, 2, 3, 4 and 5 years. A 2-year size requires 1 1/2 yards of 32-inch material. To finish neck and armeye edges with bias binding or ribbon, including the bow, will require 2 1/2 yards 1 1/2 inches wide. To trim with insertion as illustrated requires five yards. Price 15c or two for 25c.

No. 6890—Boys' pajamas. Cut in five sizes: 2, 4, 6, 8 and 10 years. A 10-year size requires 2 1/2 yards of 32-inch material. For contrasting material 1/2 yard is required 32 inches wide, cut crosswise. Price 15c or two for 25c.

No. 6891—Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. A 10-year size requires 2 1/2 yards of 35-inch material. The plaiting (or frill) on the collar will require 3 1/2 yards of material 1 1/2 inches wide, cut crosswise. Price 15c or two for 25c.

No. 6892—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. A 12-year size requires 3 1/2 yards of material 39 inches wide. The belt of contrasting material requires 1/2 yard 39 inches wide cut crosswise. Price 15c or two for 25c.

HOW TO ORDER

All patterns 15c each, two for 25c. Be sure to give number and size. Address Pattern Department, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.

TWO HELPERS INSTEAD OF ONE IN EVERY BAR
That's why

FELS-NAPTHA DISSOLVES GREASY DIRT AND BANISHES HARD RUBBING

THE MOMENT you take off the wrapper—the instant you smell its clean naphtha odor—you'll know why Fels-Naptha makes even stubborn grime vanish so quickly!

For there's naphtha in Fels-Naptha. Your nose tells you so—plenty of naphtha, the safe grease-dissolver. It's combined with good golden soap. Working together, these two cleaners search out clinging dirt. They loosen its grip and wash it away.

Thanks to this extra help, washing is easier—clothes come off the line sweetly fresh and clean, clear through. And because Fels-Naptha does away with hard rubbing, it saves both your clothes and your hands.

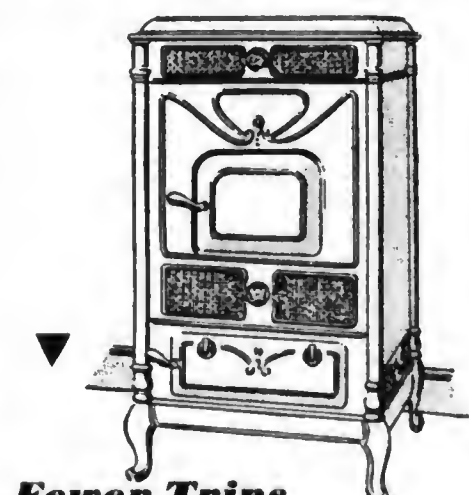
Next washday, be wise—get the real soap bargain! Get Fels-Naptha—it gives you not more bars, but more help.

Extra help in tub or machine. For soaking or boiling. In hot, lukewarm or even cool water. And for all household cleaning, too. Today, ask your grocer for a few bars, or the handy ten-bar carton.

SPECIAL OFFER—We'll be glad to send every user of laundry soap a Fels-Naptha Chipper. Many women who chip Fels-Naptha into their washing machines, tubs or basins find this chipper handier than a knife. Use it and Fels-Naptha to make fresh, golden soap chips (that contain plenty of naphtha!) just as you need them. Send only a two-cent stamp to help cover postage, and we'll mail you this chipper without further cost. Write today, Dept. 7-10-11. Fels & Company, Philadelphia, Pa.

THE GOLDEN BAR WITH THE CLEAN NAPHTHA ODOR

FELS-NAPHTHA

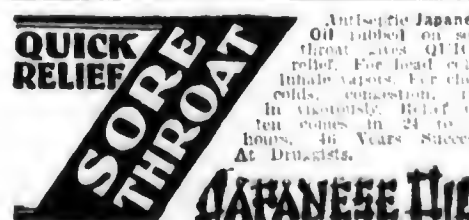
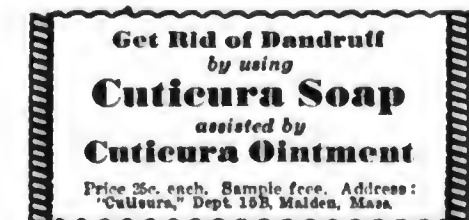


Fewer Trips to the Coal Bin... when you own a WINOLA Parlor Heater

Heating engineers praise the simplicity of design and the scientific arrangements of grates and heat radiation that make the Winola so economical to operate. Repeated tests have proved conclusively that coal goes further and gives more heat in a Winola.

Here is your opportunity of possessing—at a very small cost—a Parlor Heater that combines the finest heating qualities with beauty. Ask your dealer or write to us about our liberal Winola Five-year Guarantee Bond.

Winocraft Stove Works
Middletown, Pennsylvania



DAMP, CHILLY WEATHER keep it away from your kids COLDPROOF KNIT SLIPS

Deep, chilly days of Fall. Cold bitter days of Winter. Sore throats, colds . . . days lost at school.

Your children need the protection of Indera Figurit Knit Slips.

Indera protects by keeping warmth in and the cold out.

EXCLUSIVE FEATURES Indera has a patented border that prevents bunching between the knees and riding up around the hips. And STAY-UP shoulder straps that stay where they belong. No buttons to come off. No ironing necessary.

Indera for women, misses, children in a pleasing variety of fast color combinations. In all wool, wool and rayon, wool and cotton, also cotton, at popular prices.

At your favorite store. Send for Style Folder No. 31 in color. It's FREE. Please mention dealer's name and address.

INDERA MILLS CO.
Winston-Salem, N. C.

"Write for booklet"

BOOKLETS that are offered through advertisements, usually without cost to you, stand the advertiser anywhere from ten cents to a dollar apiece. He is willing to send them to you free because he believes that you are really interested in the goods or the service he has to sell.

Read the advertisements in this paper. When booklets are offered on subjects in which you are interested, write for them, mentioning this publication. Advertised goods of known quality are safer to buy than unadvertised goods of unknown or doubtful quality. Read the advertisements.

By W. D. ZINN

boy thinks he needs in college. I have known a hundred of them to make shipwrecks of their lives where one who worked his way through college failed.

I would like your opinion about a field I had in corn this year and would like to get it to permanent pasture for sheep. Would you sow wheat and grass or would you sow the grass seed alone? What would you sow, all bluegrass or a mixture? The land is in a fair condition. John H. Sheaffer. Adams county, Pa.

OUR correspondent would make a mistake to seed that field to bluegrass exclusively. It takes this grass about three years to make a good sod. It is propagated both by the seed and by under-ground stems, and the older a bluegrass sod the thicker it is if it is treated properly.

I believe our correspondent will get more pasture off this field if he will sow wheat with the grass seed and I would sow two bushels per acre. In addition sow three pounds each of

By S. W. FLETCHER

THE protracted drouth has brought the problem of spray residue to growers in some of the southern apple states, particularly in districts that commonly export a considerable proportion of the crop. This is not a factor in most of Pennsylvania, but some growers in the southern counties may need to reassure themselves on this point.

Various types of apple washing machines have been developed for use in the Pacific Northwest, where spray residue is a serious problem. These may be attached to the regular sizing machines. These machines have a drier attachment which dries the apples before they are run over the sizer. In the West the washers are indispensable; they do not injure the fruit, either by bruising or by lowering the keeping qualities, and they improve its appearance. Wiping machines have been largely abandoned as ineffective for removing spray residue.

The patented machine with drier attachment is too expensive to be practicable for the small grower. The United States Department of Agriculture has prepared plans of a machine without drier, which may be built by the grower for \$100 to \$200. These may be secured on application to the Department. Many home-made outfits, even more moderate in cost, are in use. It is probable that washing machines will gradually come into use in the East, even where spray residue is not a problem.

In Canada and in northern Wisconsin, Minnesota and the Dakotas they have what the Experiment Station men call "test years." These are the occasional years, perhaps once in two decades, when the winter temperature drops to around 40 degrees below zero and kills all but the hardiest varieties. Some of the most promising seedlings, which have withstood average winters, are snuffed out during a test year.

Winter hardiness is not much of a problem in Pennsylvania, except as related to peach buds, but we do have

the problem of drought resistance. The last two seasons have been test years in this respect. Some varieties withstand drought better than others, just as some are less susceptible to cereal

as some are less susceptible to certain diseases than others. At the Alder Run Orchard the Jonathan and York show comparatively little loss of size from the drouth, while an adjacent block of Stayman is seriously

timothy, redtop and orchard grass. The reason I do not recommend more orchard grass is that sheep do not relish it as much as cattle do. It is really the best grass for thin land. Sow also 14 pounds of Kentucky bluegrass per acre. In the spring sow four pounds each of red and alsike clover.

What is the average production of mushrooms in pounds per square foot?
I am planning on building a house 25x40 feet, 16 feet high; 3,600 square feet bench space. T. R. Gossan, Cumberland county, N. J.

A YIELD of mushrooms averaging one pound to the square foot of bed is considered good. Twice this is not particularly uncommon. Neither are much lower yields.

Mushroom growing is a somewhat intricate subject and it would be impossible to include sufficient information in a letter to be of much value to one beginning its culture.

I would suggest that you write the Pennsylvania Department of Agriculture, Harrisburg, Pa., and ask for a copy of General Bulletin No. 392, Mushroom Industry in Pennsylvania. G. S. W.

affected. Moreover, if belated rain do come, the Stayman is liable to crack. These are some of the factors that determine whether a variety will remain a standard commercial sort or be gradually pushed back into the list of those that have been tried and found wanting.

The Stayman has developed a number of unsuspected weaknesses during the past ten years—shy bearing (in certain districts), poor pollination, low color, susceptibility to scab cracking—and now comes this additional weakness of not standing up well under drouth. Do its high quality and the general purpose usefulness of the fruit compensate for these deficiencies? I doubt it.

A few years ago Stayman seemed destined to become the dominant variety of Pennsylvania, as the McIntosh is in New England and New York. Now it is evident that we must look for a more dependable variety or rather several of them, because no one variety can be expected to satisfy the diverse climatic and market conditions of this state.

Fruit growers have to keep on the toes, not only because cultural conditions and requirements change with the seasons, but also because market conditions and requirements are seasonal also. Constant readjustment is necessary. One season the retail grower has a splendid trade at the packing house, with consumers, hucksters and trucks from retail stores. The next year few if any trucks find their way to the orchard—the general business situation, and the market situation with respect to fruit have changed radically. So the grower

One year the wholesale grower is counted by buyers, who take his crop off his hands, right from the orchard at a fair price. The next season it is the case this year—not a buyer in sight, and the grower must consign or store. Few, indeed, and most unfortunate, are the growers who

fortunate, are the growth of the market. It counts on having the same outlet for its product year after year. The uncertainties and hazards of marketing are fully as great as the uncertainties of production. They are a powerful stimulant to initiative, but they put creases between the eyes and frost above the ears.

When we gather at Harrisburg next winter to talk things over, some of us are going to look just a little drawn after our marketing experience this season.

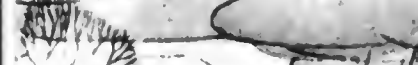
For long wear .
real protection .
solid comfort

COLD, grey days—drizzling rains—ground inches deep in mud and icy water—that's when you need real foot protection.


The Hood Red Boot will keep your feet dry and warm even though you have to work all day in mud and water. Heavy duty grey tire tread soles with big, wide extension edges for extra wear. Uppers of that special quality velvet finish red rubber that only Hood knows how to make—non-cracking, non-checking, long wearing.

From top to toe the Red Boot fits perfectly. There is plenty of room for the foot but a snug grip at the heel eliminates slipping or chafing. It will give you foot service, foot comfort and foot protection in all sorts of weather and under all conditions of hard wear. You can identify the genuine Hood Red Boot by the yellow arrow on the back.

Hood makes a complete line of boots, arctics and rubbers for every member of the family—for all work and dress occasions.



A detailed illustration showing the bottom of a boot, specifically the tread pattern of the sole. The tread consists of several curved, wavy lines designed for traction. To the left of the main tread, there is a small, rectangular inset showing a different, more complex tread pattern, possibly for a different type of boot or sole material.



MOOL MAKES CANVAS SHOES • RUBBER FOOTWEAR •

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

THE HOOD RED BOOT will give you maximum service, comfort and protection under the hardest conditions of wear in mud and water.

*Send for the Hood
booklet on Farm Footwear*

HOOD RUBBER COMPANY, Inc.
Watertown, Massachusetts



MOOL MAKES CANVAS SHOES • RUBBER FOOTWEAR • TIRES • RUBBER SOLES AND HEELS • RUBBER FLOOR TILING

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

PLEASE mention Pennsylvania Farmer when writing to our advertisers. They want to know and we want them to know that you read it all.



Learn RADIO in 8 Weeks in Great Coyne Shops

Thousands of jobs open, paying \$50, \$70 and on up to \$200 a week! Manufacturers and dealers begging for Trained Men! Many openings in Broadcasting Stations. Big call for Wireless Operators, both at Sea and in the Air. You qualify in 8 weeks—NOT BY CORRESPONDENCE, but by actual work, on actual Radio, Television and Sound equipment.

TELEVISION—TALKING PICTURES

And now Television is on the way! Soon there'll be a demand for THOUSANDS of TELEVISION EX-ECUTIVES! Get in on the ground floor of Television! Learn Television at COYNE on the very latest Television equipment! Big demand in TALKING PICTURES and SOUND REPRODUCTION! You learn ALL branches of Radio at Coyne.

Not a Correspondence School
No books. No lessons. ALL ACTUAL WORK on ACTUAL RADIO, TELEVISION and SOUND EQUIPMENT. No experience needed. Earn while you learn. Free Employment Help. MAIL COUPON NOW FOR BIG FREE BOOK.

H. C. LEWIS, President
Radio Division, Coyne Electrical School
509 S. Paulina St., Dept. 7E-12, Chicago, Ill.
Send me your Free Radio Book and all details of your Special Introductory Offer. This does not obligate me in any way.
Name.....
Address.....
City.....State.....

EDWARDS METAL ROOFS LAST LONGER—LOOK BETTER SAVE YOU MONEY

The lasting beauty and protection of Edwards Metal Roofs has been proved on thousands of country homes and farm buildings for more than 25 years. Fire can't burn them. Lightning can't harm them. Steel Roofs are plain or corrugated, with improved interlocking joints for easy, accurate installation. High grade steel, painted or galvanized, fully guaranteed.

At slightly higher price, genuine Copper-bearing, rust-resistant steel, the best in the world. Write for FREE Samples and Roofing Book No. 1981.

We Pay the Freight!

The Edwards Manufacturing Company
10341-10391 Butler Street, Cincinnati, Ohio (A)

Horse too lame to work?... Reach for ABSORBINE

Effective Absorbine quickly relieves muscles, sore and swollen from overwork. Pulled tendons, strains and sprains respond promptly to it. Won't blister or loosen hair—and horse can work. Famous as an aid to quick healing of gashes, sores, bruises. \$2.50 a bottle at all druggists. W. F. Young, Inc., 354 Lyman St., Springfield, Mass.

"PEERLESS"

Double crusher roll mills with 28" x 8" Mangle force feed plates will grind green or dry corn and all kinds of animal grains. Into a better quality of feed with less power.

Write for Catalog
A. M. DELLINGER, 723 N. Prince St., Lancaster, Pa.

Perfect Rat Trap

Catches all old rats—powerful spring released at slightest touch of bait trigger—holds rat—kind of tumbling ball—operates under straw, hay, etc., seen without danger to finger—all metal and very sturdy; outlasts many cheap traps. Get "Beaton Pat." Rat Trap and exterminate the filthy, disease-carrying and profit-destroying vermin.

Agents wanted for farming districts. You can double your money by setting traps to drive rats.

Send 5¢ for sample. \$1.25 per dozen.
A. W. DRAKE MANUFACTURING CO.,
243 South Laurel Street, Hazelton, Pa.

GIVEN! FOR SELLING CHEWING GUM
The chewing gum, drowsy, soda, tobacco, etc., is given for selling and driving out chewing gum and candy. You can make money every day. A TRUCK FULL! Write for agents' package and catalog. FREE! P. O. Box 1129, Charles Davis, Sta. V, Cincinnati, O.

PLEASE mention Pennsylvania Farmer when writing to our advertisers. They want to know and we want them to know that you read it all.

A Visit to Wirt County

By W. D. ZINN

LATE this summer I drove to Wirt county, W. Va., to attend a Four-H Club and farmers' meeting at Camp Barb. Early in the day both club members and farmers began to arrive and they continued to come until we had several hundred people. The exhibits were of fine quality and numerous. We saw some lambs of which the boy owners were very proud and they had a right to be.

I have never talked to a group of farmers who were more anxious to learn and who asked more practical questions. This section was hard hit by the drouth but these farmers had not given up. They were doing everything possible to make arrangements to winter their livestock.

It has been almost thirty years since I visited this county the first time. Then there was very little interest in agriculture, but now when I attend Farmers' Week at Morgantown I find there is a larger delegation from Wirt county than from almost any other county in the state. This is due largely to the influence of one man, Mr. Roberts, who is giving \$1,000 annually to be divided among a certain number of farmers. These farmers are scored on farming by a committee from our University.

The farmer making the highest score is given \$200 and this sum is graduated down to \$25. In this score not only the production of the farm is considered but the quality of the livestock and the appearance of the farm and home. Farmers are scored on their interest in the Farm Bureau, the public schools, the Sunday schools and the church. In short the object of this scoring is to make better citizens and good citizenship demands that farmers should be interested in all these things.

There was no more busy man on the ground than County Agent Hess. He has a big job on his hands and he is trying to be equal to it. It was a real pleasure to meet that day farmers I had not seen for many years though I had been at this meeting at the two previous years.

Wasted Sympathy

I have just read an editorial in one of our dailies in which the writer deplores the fact that so many of our boys and girls have to earn their way through college. He says some boys have to sell papers, some run a barber shop and some girls have to wait on tables, and as a result they cannot keep up with their classes.

The last statement is not correct generally speaking. The boys and girls who are working their way through college are not laggards in their classes. As a matter of fact they usually lead their classes, but it is true that once in a while they are broken down by their strenuous work. I believe it would be better for them if they would take one more year in college and then when they finished they would be much better prepared for the duties of life than one who had his way paid for him.

Educationally we are living in too fast an age. The child is graduated from the grades at 12 or 13 years of age and from the high school at the age of 17 years. He or she has then come to the forks of the road. One fork leads through college and the other leads to a business, and the children do not have minds sufficiently developed to determine which road they should travel. At that age I am sure I did not have judgment enough to decide what I should do.

Our girls and boys should be older when they come from high school and older when they enter college, but I do not believe every graduate from our high schools should go to college. I believe the editor referred to above is wasting his sympathy on the wrong fellow. He needs to have more sympathy for the boy whose father furnishes all the money the

boy thinks he needs in college. I have known a hundred of them to make shipwrecks of their lives where one who worked his way through college failed.

He Wants Pasture for Sheep

I would like your opinion about a field I had in corn this year and would like to get it to permanent pasture for sheep. Would you sow wheat and grass or would you sow the grass seed alone? What would you sow, all blue-grass or a mixture? The land is in a fair condition. John H. Sheaffer, Adams county, Pa.

OUR correspondent would make a mistake to seed that field to blue-grass exclusively. It takes this grass about three years to make a good sod. It is propagated both by the seed and by under-ground stems, and the older a bluegrass sod the thicker it is if it is treated properly. I believe our correspondent will get more pasture off this field if he will sow wheat with the grass seed and I would sow two bushels per acre. In addition sow three pounds each of

timothy, redtop and orchard grass. The reason I do not recommend more orchard grass is that sheep do not relish it as much as cattle do. It is really the best grass for this land. Sow also 14 pounds of Kentucky bluegrass per acre. In the spring sow four pounds each of red and alsike clover.

Mushroom Production

What is the average production of mushrooms in pounds per square foot? I am planning on building a house 25x40 feet, 16 feet high; 3,600 square feet bench space. T. R. Gossan, Cumberland county, N. J.

A YIELD of mushrooms averaging one pound to the square foot of bed is considered good. Twice this is not particularly uncommon. Neither are much lower yields.

Mushroom growing is a somewhat intricate subject and it would be impossible to include sufficient information in a letter to be of much value to one beginning its culture.

I would suggest that you write the Pennsylvania Department of Agriculture, Harrisburg, Pa., and ask for a copy of General Bulletin No. 392, Mushroom Industry in Pennsylvania. G. S. W.

Orchard Windfalls

By S. W. FLETCHER

THE protracted drouth has brought the problem of spray residue to growers in some of the southern apple states, particularly in districts that commonly export a considerable proportion of the crop. This is not a factor in most of Pennsylvania, but some growers in the southern counties may need to reassess themselves on this point.

Various types of apple washing machines have been developed for use in the Pacific Northwest, where spray residue is a serious problem. These may be attached to the regular sizing machines. These machines have a drier attachment which dries the apples before they are run over the sizer. In the West the washers are indispensable; they do not injure the fruit, either by bruising or by lowering the keeping qualities, and they improve its appearance. Wiping machines have been largely abandoned as ineffective for removing spray residue.

The patented machine with drier attachment is too expensive to be practicable for the small grower. The United States Department of Agriculture has prepared plans of a machine without drier, which may be built by the grower for \$100 to \$200. These may be secured on application to the Department. Many home-made outfits, even more moderate in cost, are in use. It is probable that washing machines will gradually come into use in the East, even where spray residue is not a problem.

"Test Years"

In Canada and in northern Wisconsin, Minnesota and the Dakotas they have what the Experiment Station men call "test years." These are the occasional years, perhaps once in two decades, when the winter temperature drops to around 40 degrees below zero and kills all but the hardiest varieties. Some of the most promising seedlings, which have withstood average winters, are snuffed out during a test year.

Winter hardness is not much of a problem in Pennsylvania, except as related to peach buds, but we do have the problem of drouth resistance. The last two seasons have been test years in this respect. Some varieties withstand drouth better than others, just as some are less susceptible to certain diseases than others. At the Alder Run Orchard the Jonathan and York show comparatively little loss of size from the drouth, while an adjacent block of Stayman is seriously

affected. Moreover, if belated rains do come, the Stayman is liable to crack. These are some of the factors that determine whether a variety will remain a standard commercial sort or be gradually pushed back into the list of those that have been tried and found wanting.

The Stayman has developed a number of unsuspected weaknesses during the past ten years—shy bearing (in certain districts), poor pollination, low color, susceptibility to scab, cracking—and now comes this additional weakness of not standing up well under drouth. Do its high quality and the general purpose usefulness of the fruit compensate for these deficiencies? I doubt it.

A few years ago Stayman seemed destined to become the dominant variety of Pennsylvania, as the McIntosh is in New England and New York. Now it is evident that we must look for a more dependable variety or rather several of them, because no one variety can be expected to satisfy the diverse climatic and market conditions of this state.

Changing Market Conditions

Fruit growers have to keep on their toes, not only because cultural conditions and requirements change with the seasons, but also because market conditions and requirements are seasonal also. Constant readjustment is necessary. One season the retail grower has a splendid trade at the packing house, with consumers, hucksters and trucks from retail stores. The next year few if any trucks find their way to the orchard—the general business situation, and the market situation with respect to fruit, have changed radically. So the grower is obliged to look for other outlets.

One year the wholesale grower is courted by buyers, who take his crop off his hands, right from the orchard, at a fair price. The next season—this is the case this year—not a buyer is in sight, and the grower must consign or store. Few, indeed, and most unfortunate, are the growers who can count on having the same outlet for their product year after year. The uncertainties and hazards of marketing are fully as great as the uncertainties of production. They are a powerful stimulant to initiative, but they put cramps between the eyes and frost above the ears.

When we gather at Harrisburg next winter to talk things over, some of us are going to look just a little drawn after our marketing experience this season.

THE HOOD RED BOOT

For long wear .
real protection .
solid comfort

COLD, grey days—drizzling rains—ground inches deep in mud and icy water—that's when you need real foot protection.

The Hood Red Boot will keep your feet dry and warm even though you have to work all day in mud and water. Heavy duty grey tire tread soles with big, wide extension edges for extra wear. Uppers of that special quality velvet finish red rubber that only Hood knows how to make—non-cracking, non-checking, long wearing.

From top to toe the Red Boot fits perfectly. There is plenty of room for the foot but a snug grip at the heel eliminates slipping or chafing. It will give you foot service, foot comfort and foot protection in all sorts of weather and under all conditions of hard wear. You can identify the genuine Hood Red Boot by the yellow arrow on the back.

Hood makes a complete line of boots, arctics and rubbers for every member of the family—for all work and dress occasions.



THE HOOD RED BOOT will give you maximum service, comfort and protection under the hardest conditions of wear in mud and water.

Send for the Hood booklet on Farm Footwear

HOOD RUBBER COMPANY, Inc.
Watertown, Massachusetts



HOOD MAKES CANVAS SHOES • RUBBER FOOTWEAR • TIRES • RUBBER SOLES AND HEELS • RUBBER FLOOR TILING

DODGE BROTHERS

A DEPENDABLE EIGHT NOTED FOR ECONOMY

Both town and country owners of the Dodge Eight-in-Line find it a truly economical motor car. » » It has the day-in-and-day-out dependability so typical of all Dodge cars. It requires little in attention or maintenance; delivers its smooth, vigorous power with surprisingly low fuel and oil consumption. » » The safe, silent Mono-Piece Bodies are squeakproof, rattle-

proof, exceptionally roomy and comfortable. The internal hydraulic brakes need no lubrication or equalizing adjustments. » » In economy as well as in power and masterful performance, the Dodge Eight-in-Line is a sound choice for those who ask much of a motor car. Get behind the wheel and learn at first hand how much it offers at its surprisingly low price.

OUT TO MAKE NEW MILEAGE RECORDS

The Dodge Eight Mileage Marathon car is continuing day after day on its hard grind back and forth from coast to coast—piling up mile after mile in all sorts of going to establish new facts and figures about Dodge dependability and long life.

DODGE SIX, \$835 TO \$935—DODGE EIGHT-IN-LINE, \$1095 TO \$1145. F. O. B. FACTORY

Dodge Eight closed cars are factory-wired for immediate installation of Transitone—pioneer automobile radio. Other models will be equipped on order. Ask for a demonstration.



© 1930 by Dodge Brothers Corporation

October 11, 1930

PENNSYLVANIA FARMER

(315) 15

Tom Barron, Poultry Breeder

By H. C. KNADEL

The farm of Tom Barron is at Catforth near Preston, England. Mr. Barron has been known for years as one of the leading breeders of high egg producing birds in the British Isles. His stock has been shipped all over the world. Many poultrymen in the United States today have his stock in their breeding pens.

Mr. Barron has an immense proposition. His stock appears unusually rugged and sturdy. The general feeling one obtains as soon as foot is set on the farm is the permanency and the firm financial basis of the entire enterprise.

The three chief varieties kept are Rhode Island Reds, White Wyandottes and Single Comb White Leghorns. The stock is given ample range and in most cases not more than 200 chicks are brooded together. When the cockerels are removed and the pullets culled, the remaining females are confined to a grass plot with a small house in the center. Because of the excessively wet weather, the grass is always green and tender, and because the fowls are not crowded, the range is always in good condition. Long, double rows of houses for breeding pens and range stock with permanent roadways aid materially in reducing labor costs.

A Life-Long Ambition

Hatching on this farm begins in early February and ceases in May. Trapping is done to some extent. Particular attention is devoted to size, color and shape of egg as well as number of eggs laid.

At 4:00 p. m. tea was served by Mr. and Mrs. Barron to the 400 guests assembled. As we left the farm at 5:00 p. m. for our return trip to Liverpool, we all felt that a life-long ambition had been realized—that of visiting with Mr. Barron on his own farm. While some of us had met him on other occasions, yet to know a man well is to meet him on his own ground and in his own home. Mr. Barron has done much for the poultry industry of England. May he live a long and useful life!

The crowning event of the British fair tour took place on Saturday night, August 9th at 7:00 p. m. at the Adelphi Hotel in Liverpool when the Royal Lancashire Agricultural Society gave a banquet to the 400 guests from 61 countries. Many dignitaries representing Liverpool and various phases of the government were present. It is surprising to see what an interest these business men and government officials take in the development of the poultry industry.

Where Parasites Prevail

On Sunday, August 10, some of us were awakened at 5:00 a. m. in order to get away by six o'clock for a tour of the English Lake district and another specialized poultry farm. It was good for our souls that we did suspect this particular farm, since up to this time we had been unable to observe that any disease problems beset the English poultry breeders. This fallacy was soon to be knocked into a cocked hat, for on this farm very poorly developed stock was in evidence. Coccidiosis and worms were taking their toll. I just thought to this illustration to give you folks heart. Apparently poultry diseases and parasites are not respecters of nationalities.

While it rained most of the day and thus made it impossible to obtain a fair view of the English Lake district, yet in the 200-mile auto ride we did see some beautiful scenery. These lakes for the most part would compare quite favorably with the lake district in the Adirondack Mountains of New York state.

Would You Rather Have 14,520 EGGS or 16,302 EGGS?



14,520 is a big figure — especially when it's that many eggs. And we have a pen of 100 pullets that laid that many in 9 months. But we also have a pen of 100 pullets that laid 16,302 eggs in 9 months. And 16,302 is bigger than 14,520 by 1782 eggs.

Both these pens of pullets are mighty good layers. You can see that from the eggs they laid in 9 months. Both received the best of feed and care. It takes good feed and care to make 100 pullets lay 14,520 eggs in 9 months. But what does it take to make 100 pullets lay 16,302 eggs in 9 months—especially when these pullets are just like the ones that laid only 14,520 eggs — and when they received the same identical feed and care? It takes Dr. Hess Poultry Pan-a-min in addition to good feed and good care. That is just exactly what the pen that laid 16,302 eggs received — Dr. Hess Poultry Pan-a-min. That and that alone accounts for the difference of 1782 eggs between these two pens of fine pullets.

Dr. Hess Poultry Pan-a-min is a conditioner and mineral supplement that helps hens turn feed into eggs. Its conditioning properties keep them in laying trim day in and day out. Its vital elements will increase the production of your flock—no matter how good the hens or the feed—just as it did for the hundred pullets that laid the 16,302 eggs. Buy a supply from your local dealer now or write us. It's time to start your flock off to a record in fall and winter egg production. Dr. Hess & Clark, Inc., Ashland, Ohio.

*By the best of feed and care we mean a mash of ground corn, wheat middlings, wheat bran, meat scrap, dried buttermilk, soy-bean meal—a scratch feed of cracked corn and whole wheat—also cod-liver oil and oyster shell—lights in the morning. Both pens received all these things in the same proportion and in the same way. But no matter what the feed, it is good feed and care plus Pan-a-min that makes extra fall and winter eggs. Dr. Hess & Clark, Inc., Ashland, Ohio.



Here are the best pullets that laid 14,520 eggs in 9 months. Below are the Pan-a-min pullets that laid 16,302 eggs.

Dr. Hess Poultry



PAN-A-MIN

KEEPS HENS IN LAYING TRIM



Kill Rats Without Poison

A New Extremist that Won't Kill Livestock, Poultry, Dogs, Cats, or even Baby Chicks. K-R-O can be used about the home, barn or poultry yard with absolute safety. It contains no deadly poison. K-R-O is made of Squill, as recommended by U. S. Dept. of Agriculture, under the Connable process which insures maximum strength. Two cans killed 578 rats at Arkansas State Farm. Hundreds of other testimonials. Sold on a Money-Back Guarantee. Insist upon K-R-O, the original Squill exterminator. All drugists, 75c. Large size (four times as much) \$2.00. Direct if dealer cannot supply you. K-R-O Co., Springfield, O.

K-R-O
KILLS-RATS-ONLY



METAL ROOFING

CONSUMERS MFG. & SUPPLY CO.
Dept. F. Moundsville, W. Va.

Get Rid of CANADA THISTLES

The Little Wonder Weed Exterminator will positively destroy them. A spraying solution (not a chlorate); costs only 5c per gallon; will not ruin the soil nor kill cattle. Write for free illustrated booklet. REBER CHEMICAL COMPANY Reading, Pa.

LET US TAN YOUR HIDE

FUR DRESSERS and TAXIDERMISTS
SEND FOR CATALOG
The Crosby Frislan Fur Company
564 Lyell Avenue Rochester, N. Y.

Navy Brand Concentrated Buttermilk From Tuberculin Tested Cows 29 per cent milk solids, 9 per cent lactic acid. Rich as cultured with no foreign ingredients. Reduces fat-pickling and lessens danger from coccidiosis. Increases egg production and promotes fertility and hatchability. Good for chicks, broilers and laying hens. Sold direct from the factory in barrels of about 485 lbs. Half barrels, about 200 lbs. Write for prices. TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, PA.

BROILER—RAISERS

SHIPPING CRATES LOANED FREE. SHIP YOUR LIVE BROILERS and other poultry to New York's Oldest Live Poultry House. Est. 1883. We are bonded commission merchants. Birds fed; returns made daily. Highest prices. Our outlet is unlimited. Inquire about us. Write for quotations, crates, tags, shipping instructions. Holidays. Catalog. Folder F-2. KRACKAUR POULTRY CO., INC., West Washington Market, New York City.

Every dollar you save in your purchases is a dollar added to the profits of your farm.

Every dollar spent for unsatisfactory merchandise is a dollar added to your costs. Read the advertisements and be guided by them.

ANSWER THEM and say you saw their advertisement in the Pennsylvania Farmer.

BRANDED FOR YOUR PROTECTION



There's profit in winter eggs . . . if you get them

Last winter an experiment station test discovered how much difference in egg production occurs when CEL-O-GLASS is used in place of glass. The difference was 92% in favor of CEL-O-GLASS! At the Vineland Egg-laying Contest, egg production has risen 78% since CEL-O-GLASS was installed. And Geo. E. Becker, Stoughton, Wisconsin, writes, "175 hens behind CEL-O-GLASS averaged well over 100 eggs per day, from December to April."

Also, CEL-O-GLASS houses are warmer. At the New Jersey Experiment Station Poultry Farm a CEL-O-GLASS house registered an inside temperature of 39° above zero when it was 1° below zero outside, while a house with glass windows—but identical in every other way—only registered 10° above zero.

How CEL-O-GLASS works

CEL-O-GLASS admits the sun's ultra-violet rays. Ordinary glass and soiled cloth curtains bar them out. These valuable rays cause the hen's blood to manufacture Vitamin D, so that she makes better use of calcium and phosphorus—the bone-building and shell-making minerals.

Properly installed, CEL-O-GLASS will last for years. But you can easily figure how it will pay for itself long before it needs to be renewed.

For instance: fifty to sixty

square feet of CEL-O-GLASS is enough for 100 hens. If the use of CEL-O-GLASS would cause these hens to produce, on the average, 4 more eggs per month, a single month's extra revenue—with eggs selling as low as 25¢ per dozen—would amount to \$8.00. That would pay for the CEL-O-GLASS. After that everything would be clear profit.

For longest life and correct ventilation install CEL-O-GLASS on frames in a vertical position. Hinge frames to swing in and to the side or up under the roof during summer months. Or construct frames to slide down behind the front.

CEL-O-GLASS in brooder houses reduces chick mortality, raises healthy chicks—in hog houses, prevents weak legs. Good for dairy barns, cold frames, hot beds, back porches, storm windows, storm doors, and sleeping porches.

Free valuable blue-print books on poultry and hog houses, back porches, and cold frames. Write Acetol Products, Inc., Dept. 1010, 21 Spruce St., New York City.



© 1936, Acetol Products, Inc.

CEL-O-GLASS

Lowest prices since 1924

Tune in on THE SUNSHINE COUNSELLOR every Friday 12:30 Noon, Central Standard Time. Poultry Market Reports . . . Poultry Health Talk . . . Stations—KDKA, WLW, WJL, KYW, KSTP, WOC, WHO, KWK, WHAP, WOW, KFAE, KGA, WREN

Poultry Problems

Number per Crate

Will you please inform me as to the correct number of poultry and rabbits that can be put in a crate to ship by express? Also if water must be provided? Win. V. Schmoey, Bucks county, Pa.

ACCORDING to the size, the regulation spindle crate will hold about twelve to fifteen hens, twenty broilers or ten to twelve rabbits. It is not necessary to provide water for ordinary shipping distances, such as to New York or Philadelphia. R.L.S.

Poultry on Shares

Will you please answer my problem as to raising chickens on the half and half basis? For six years I have been caring for a flock of old chickens. Get half of all eggs during the year and at hatching time I furnish half of all eggs set. I find half of all feed and get half of all young chickens in fall. I stand half of all chickens killed on road or die. Is this a fair arrangement? Mrs. Etta McClellan, Centre county, Pa.

ACCORDING to your outline, you and your partner share the expenses and income of the flock equally, while I suppose that you put in your care against the use and maintenance of the buildings and equipment, in which case I think your arrangement should be satisfactory. R. L. S.

Trouble with Ducks

Will you please tell me the trouble with my ducks and how to overcome it? The symptoms, as near as I can tell you, are as follows: The feathers come off the backs. The ducks seem light-headed and rheumatic. One leg seems to be at right angles and they cannot walk. Their appetites are good or seemingly so, but they don't grow any. A. D. Hess, Fulton county, Pa.

DUCKS are usually pretty hardy and free from trouble. However, wet, crowded and dirty quarters sometimes cause such troubles as you describe. If conditions are good feeding may be responsible. If you can get in touch with your local county agricultural agent it would be a good idea to have him look at your flock, as it would be easier to determine what is the matter with your ducks after seeing them than it is at a distance. R. L. S.

De-tailed Pullets

I have a flock of White Leghorn pullets that have the habit of pulling tail feathers. They pull feathers until blood comes. Half the flock has no tails. What could you recommend to stop this habit? Robert Richardson, Wyoming county, Pa.

THE habit of tail picking usually starts when growing birds are crowded or closely confined, and once the habit of picking the blood-filled quills is formed it is difficult to stop. Smearing tar or some of the commercial anti-pick salves on the parts may help, and if your birds are crowded giving more room will be a good thing. R. H. S.

Galluscide

Would you please advise us as to what is the cause of cannibalism among chickens? We have a flock of White Leghorns and it's terrible the way they kill. Every day they kill three or four, mostly male birds. York county, Pa.

Mrs. Cornelius E. Yohe. CANNIBALISM in chickens is usually the result of some fault of management rather than feeding, and if it goes on for any length of time it becomes a vicious habit that is very difficult to control. Crowding of young stock very often starts this picking, and the habit once formed is liable to continue through life. Prolaps in laying birds, where the other members of the flock pick at the protruding membranes, also may start picking.

Very often one or two individuals are the ring-leaders, and if you are able to spend a little time in the pens you may be able to catch and dispose of such birds. Also, if the birds are now confined giving them range may help to stop the trouble. R.L.S.

"Worms Had Her Licked Till We Tried N-Ks"



Now She's Laying Again

Pratts N-K tablets are new, but already stories like these are pouring in. State colleges told us what ingredients to use—Nicotine for large round worms and Kamala for tape worms. Our job was to get them to the worms in fresh doses. We did it with an airtight, insoluble coating that breaks only when it reaches the gizzard. Fresh Nicotine and Kamala hits worms right at the vital spot. Gets results in a day. Get a supply of N-K today at your dealer or by mail.

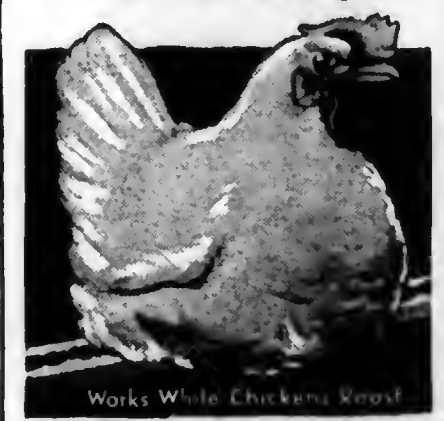
Pratts N-K TABLETS

SEE YOUR DEALER IF HE CANT SUPPLY YOU. ORDER BY MAIL. Enclose money order or stamps, indicating the size and quantity desired. We pay postage.

Adult Size	50	100	150	200	250	300	350	400	450	500
Child Size	50	100	150	200	250	300	350	400	450	500

PRATT FOOD CO., 124 Walnut Street
Dept. 167-A, Philadelphia, Pa.

FUMES Kill Lice Over-night!



"Paint" "Black Leaf 40" on Roosts. Only a paint brush, "Black Leaf 40", and a few minutes' time for lightly "painting" top of roosts, are required to delouse an entire flock. When chickens perch, fumes are released permeating the feathers, killing the lice. No longer necessary to handle each bird. Ask your Experiment Station. The \$1.25 package "paints" 100 feet of roost. If your dealer cannot supply you, order direct. Tobacco By-Products & Chemical Corp., Inc. Louisville, Ky. 5

Black Leaf 40

"Paint" it on the Roosts

ADVERTISEMENTS

are short-cuts to finding out truths. The truths about everything you want to buy. The names in advertisements are symbols of solid reputation. The labels in advertisements are symbols of satisfaction. It pays to read the advertisements, for then you know what is good. The products they tell you about are being bought, tested constantly. The fact that they're still being advertised is alone proof of their worth.

Lice on Cabbage

By GILBERT S. WATTS

IN dry seasons cabbage lice usually develop to a serious degree. The present season has been no exception and of course is too far advanced to make control measures effective now. Nicotine dusts or sprays are the standard materials and the time to begin is before extensive infestation occurs. But it may be of interest to report aphid conditions in a five-acre field of cabbage that we now are harvesting.

About the tenth of August scattered colonies of the pest could be found all over the field and I decided to spray or dust. Then it became so extremely dry that I laid a temporary two-inch pipe line and irrigated four of the five acres. Two applications of water were made, an inch and a half each time with an interval of a week between. It seemed the lice were losing out on the watered section and no nicotine was used. Now every plant in the unwatered part is covered with the insects. In the watered part not one plant in a hundred has been hurt. Probably the difference is due both to the tendency of the watered cabbage to outgrow the attack and to an adverse effect of the water on the aphids.

Possibly some will dispute the latter part of that statement, but the fact remains that few aphids are present in the irrigated section. Incidentally the drouth-stricken acre will yield a scant ton of very poor cabbage. The remainder is making eight tons of first-class heads and would have made double that if we had begun watering a month sooner.

Tomato Leaf Mold

HEAT and ventilation are of prime importance in the control of tomato leaf mold in greenhouses, as they help maintain a low relative humidity.

A relative humidity above 90 per cent for several hours is necessary for infection to take place. Heating at night after the first week in September and as long in the spring as tomatoes are picked, combined with the maximum amount of ventilation, is recommended by L. J. Alexander, of the Ohio Experiment Station.



New Use for Old Lamps

THE side lamps from the old family carriage have been put to a new use by Charles Hadley, a central New York farmer, as part of his attractive sign for a roadside stand. Their novelty catches the traveler's eye in the daytime and their light on the sign at night, in a section where electricity is not available, gives a uniqueness which the antique lover appreciates. Thos. H. Wittkorn.



Eshelman

results are for the whole flock—not just one bird

A TEST of 100 hens on Eshelman Laying Mash showed them laying at the rate of 75 eggs per day over a four-month period. This is typical of many similar results—and justifies the Eshelman policy in feeding. Eshelman Feeds build body health, which in turn results in year 'round egg production. Not simply for the prize winner at the show, but for the profit-earner in your flock, use this farm-developed, farm-tested feed.

Since 1842 four generations of the Eshelman family have been in the feed business. The men who make Eshelman feed for you are most of them farm-raised. They bring a knowledge, an interest, a pride to their work—which produces better feed.

JOHN W. Eshelman & SONS
LANCASTER, PA.



Whether it is a dairy feed or a mash, for hogs or horses, Arcady Wonder Feeds are the finest you can buy—mixed by special formulas to give your stock and poultry the maximum in feeding. Your dealer carries Arcady Wonder Feeds. See him today or write us direct.

ARCADY FARM & MILLING COMPANY
Dept. 52 Brooks Building, Chicago, Ill.



WHITE LEGHORN CHICKS

Farris and Hollywood Strains
Send orders now for delivery February, March and April. Write for the circular JUNIATA POULTRY FARM, Box 2, Richfield, Pa.



WONDER FALL CHICKS and DUCKLINGS

of best quality. Postage paid and live arrival guaranteed. Fall chicks and ducklings are best for profitable broilers. Winter meat and spring eggs. Buy now and reap the profit. Mature breeders at right prices. 40 breeds to offer. Catalog FREE.

NABOB HATCHERIES, Box 22, GAMBIER, OHIO

ENGLISH - AMERICAN WHITE LEGHORN PULLETS

\$1.25 each and up.
Free range, good value. Folder free on request.
LAUREL LOCKS FARMS, Poultry Dept. Pottstown, Pa.

ULSH'S Superior Chicks

White Wyandottes, White Rocks and Barred Rocks. Write for Fall & Winter prices. Hatches weekly the year round. 100% live delivery guaranteed. Postage paid.
JAS. E. ULSH, Box P, Beaver Springs, Pa.

QUALITY CHICKS

White Wyandottes—all ages, A.P.A. Certified. Doomed free. Large (12), Heavy (10), Light (8). Attractive prices on 2 & 4 week old chicks. C.O.D. Postage paid. 100% live arrival.
J. A. Baumgardner, Beaver Springs, Pa.

"Pure-bred" BARRED ROCK CHICKS

\$9 per 100; \$85 per 1,000; Heavy Mixed, \$8 per 100
Premium Service, C.O.D. 100% live delivery guaranteed.
CHAS. F. EWING, R. 1, McClure, Pa.

Read the Advertisements

Advertisements give you a high point of view without any climbing at all. They spread world products before you—servants to serve you, conveniences to please—prices low because so many thousands are using the same. They give you a new conception of what you'd like to own. No longer will a watch or food chopper do—but the highest improved watch or food chopper. No longer just a radio—but one of purest transmission. They make you change your mind about what you started to choose, and choose something more pleasing at no higher price. They help you see the whole field of satisfying wares. They lift you to fresh joys.

Eshelman

SCRATCH FEED
An excellent grain supplement for the laying mash. Scatter in litter and make the birds work for it.

Eshelman

RED ROSE 24
A high grade, complete, balanced ration, containing molasses. Palatable, digestible, adapted for feeding with low grade roughage.

Eshelman

FATTENING MASH
Especially economical for rapidly increasing weight and improving flesh quality of birds for market—no grain feed required.

Eshelman

76-page ILLUSTRATED BOOK
on hatching, housing, care and feeding of poultry.
Send FREE book on
☐ Hens ☐ Cows ☐ Horses ☐ Dogs

(NAME) _____

(ADDRESS) _____

P.F.-5



The Young People

A Party on Witches' Night

WITH the arrival of the late fall come thoughts of Halloween parties, where once more we can gather together and enjoy a good frolic. There are many ways in which a Halloween party may be successful. Here are a few suggestions.

A pretty Halloween invitation may be made of pumpkin-colored paper in one corner of which a witch mounted on a broomstick may be sketched. Or black cardboard with sticker showing a white ghost if you are having a ghost party.

Instead of having the guests enter the house by the front door have them come through the cellar. Against the weird darkness of candlelight cellar walls, have dummies of broomsticks dressed in old clothes with ghost or witch faces. Jack-o'-lanterns here and there will add to the effect. Two ghosts might greet the guests at the top of the cellar steps. Yellow or orange crepe paper over electric lights will give the required dimness.

If you want something really exciting hang a dark blanket over the cellar walls, have three girls standing in front of the blanket, their hair fastened to a nail above their heads, giving the effect of hanging by their hair. Another dark blanket covers these models from the neck down—and here we have Bluebeard's wives. Of course, the figures must be careful not to show any signs of life, no matter what sort of remarks are directed their way.

Use the Old Games

After the ghost walk, have your guests come back upstairs and after all have been identified, have them remove their burdensome headcoverings.

Of course all the old Halloween games should be played—bobbing for apples, fortune telling and others which I don't need to list here. No October party could be complete without some of these.

A game that usually occasions quite a little fun is to give each guest a string and suggest that seven knots be tied. After that is done, request them to untie them. The one untying his or her knots first will be the first of the crowd to be married.

If the crowd isn't too large, give each guest a carrot and a kitchen knife. A prize might be given for the most "carrotty beauty" carved in ten minutes' time.

Everybody knows the old game of pinning the tail on the donkey. It is always great fun to pin the cat's eyes in the proper place.

Then a matrimonial race may be introduced. Each girl must carry to a goal at the opposite side of the room a spoonful of small round candies in one hand and a potato balanced on a knife blade in the other. The winner of this race must arrive at the goal with all the candies and the potato in their original positions. The one who can perform this feat will be the first of the company to be married.

For a quiet game—give each person a clothes pin, a marshmallow and a good-sized square of black crepe paper, announcing that the one constructing the most fascinating witch in ten minutes will be given a prize, which might be a child's broom "for the witch to ride upon."

All About the Cat

Give each guest a sheet of paper and pencil and have them write down

the number of the question and the answer. The answers will be some part of a cat:

1. A subordinate part of a sentence (clause).
2. A narrative (tale).
3. Part of a needle (eye).
4. A tree of the northland (fir).
5. Essential to a carpenter (nails).
6. To stop temporarily (pause).
7. The habitat of corns (toes).
8. Part of a saw (teeth).
9. A daring accomplishment (feat).
10. Part of the barber business (whiskers).

Blindfolded Partners

Line the men on one side of the room and the girls on the other. Blindfold them all and at a given signal start them to meet each other. When a man meets a girl they shake hands and become partners. If the guests are shifted about a bit after they are blindfolded and before they start to meet each other, there will be more confusion and fun.

A Ghost Story and Ghostly Lights

Be sure to have some one tell a thrilling ghost story just at midnight. When the story is to be told, seat your guests in a circle on the floor. In the center place three or four lighted candles. As the telling of the story proceeds the candles go out one by one.

The secret of this is to cut the candles in two and then put them together again by heating the two pieces slightly. Of course when the candle has burned down to the cut in the wick it will go out. Cut each candle a little lower down so that they will be sure to go out one at a time. Try one candle before cutting the others to find out how long it will burn between two points.

A splendid book with suggestions for all sorts of parties may be purchased from the Eldridge Entertainment House, Franklin, Ohio.

Hints for Lunch

Purchase crepe paper tablecloths and napkins that have the greatest suggestion of mystery to them. Make place cards of black cardboard cut in shape of question marks and initial with name of guests in white ink. Each guest must look for his initialed question mark in order to find place. Cover all of the dishes with white paper bearing black question marks.

Serve sandwiches of mixed fillings so guests won't know just what kind they are. Make individual cakes and outline question marks on them with small candies. Get long licorice "shoe-string" candy and tie into loops around stalks of celery. The folks



Drawn by Etta Freeman, Pennsylvania.

HALLOWEEN PLANS

When it's dusky all about
And the girls and boys run out
Bringing Jack-o'-lantern too,
He knows what he means to do:
On a gatepost he'll sit high
Scaring timid passers-by:
Through the windows he'll look in
With a toothy goblin grin.
While there's scurrying here and there
In the frosty autumn air,
Jack-o'-lantern joins the fun,
Has as much as anyone!
—Emily Rose Burt.

will have to look twice to make sure just what this is. Tie fruit up in the fancy crepe paper.

Serve vanilla ice cream and make question marks on it with small licorice candies. Cover the tops of the coffee cups with little disks of cardboard with question marks painted on them. Take oranges and scoop out centers and then fill with candies and salted nuts. Wrap in the fancy paper, tie with ribbon and use as favors.

Why We Have Halloween

HALLOWEEN had its beginning in pagan rites that date back hundreds and hundreds of years to a time long before the Christian Era.

Three times a year the Druids, who lived in Celtic Britain, offered up sacrifices to their gods and built bonfires upon the hilltops to ward off evil spirits. The last of these ceremonies was always performed on the last evening of October.

It is to ancient Rome that we must turn to find the origin of the name Halloween. In February of each year the Romans formally held public religious rites known as Feralia in honor of the dead. In 610, A. D., the Pope ordained that the old Roman temple, the Pantheon, should be converted into a Christian church and dedicated to the memory of all the martyrs. The festival was held on May 1 until 834, when it was moved forward to November 1. Naturally enough when it reached Great Britain it became associated with the old Druid feast, which was held at this time and which was called Haligan or All Hallows. The night before it was known as All Hallows' Eve or Even and this was soon shortened to Halloween.

Little Folks' Corner

Timmy Twichet's Prisoners

By RUTH PLUMLY THOMPSON

(Continued from last week.)

The captain of the wooden soldiers stuck his head through the bars and questioned Timmy as to terms. Timmy said that the present mode of entertaining them was not at all to his liking, nor to his ideas of hospitality, but that certain circumstances had made it necessary, after which long speech he paused and blew his nose violently. He was especially sorry, he continued, to subject the lady dolls to imprisonment, and if the soldiers would give their word of honor not to try to escape, he, Timmy, would unlock the door and allow the dolls to return to the nursery, where they, no doubt, were sorely missed. And he also asked that Miss Arabella sign a paper relinquishing all claim to the doll house in the garret. After much consulting together the prisoners agreed to Timmy's terms, the required paper was signed and handed through the bars, and Timmy held the door open wide enough for the two dolls to slip through, carefully closing it again when they had done so. Calling the country mouse, he bade him fetch the car, and after winding it up, he politely helped the two dolls in and drove them to the top of the garret steps, where they left him with every assurance of good feeling, promising to call in a short time, and inviting him to supper the following Sunday.

JUST A REMINDER

I KNOW some of you are going to be holding your breath until you see whether your contributions are to be prize-winners in our October contests.

Every reader has a chance to win the fine prizes offered for the best drawings or stories on the subjects listed below.

Send your letters before October 20 to Young People's Editor, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.

You may submit one or more contributions on any or all of the following:

1. Free-hand drawing of your own home.
2. Poster on "Kindness to Animals."
3. Write an unfinished story.
4. Short essay on "Things I Wish My Mother (or Father) Wouldn't Do."
5. Short poem on "Fall."
6. Drawing for the Little Folks to color.

Three prizes for each contest.

DID THIS HAPPEN TO YOU?

Prize Poem.

THIS is the month of Halloween,
Time of witches and ghosts.
When such spooky faces stare out at you
From all the corners and posts.

I made a Jack-o'-lantern once
Carved from a pumpkin you know,
To scare John Smith, but goodness me!
Alas! I was too slow.

While going out to play the joke
A ghost came following me.
All wrapped up in a great big sheet,
So that no one could see.

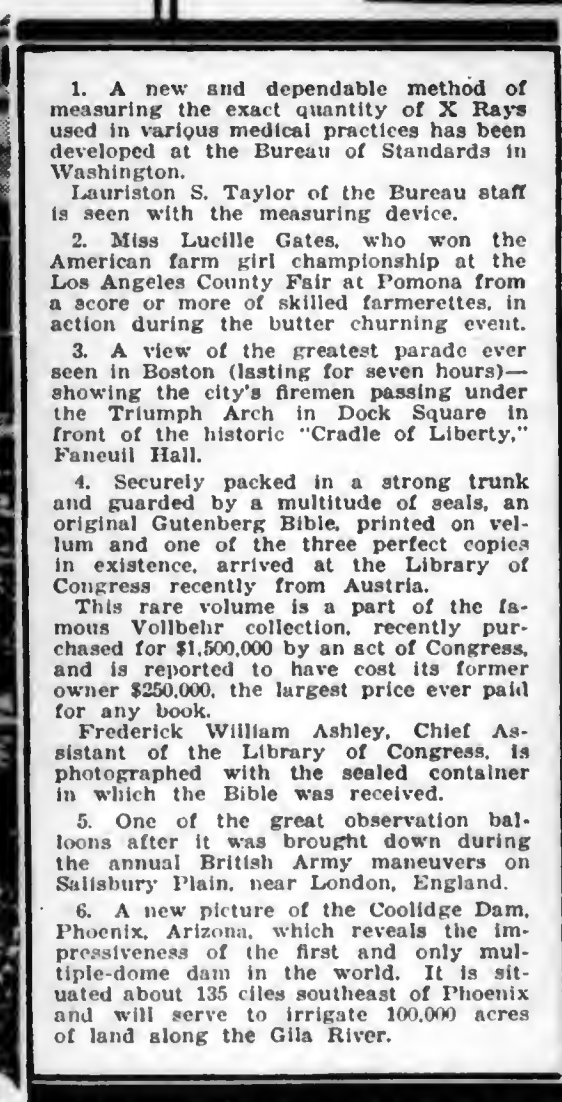
It scared me, oh, so awful bad.
I tried to climb a tree
When John Smith grabbed me by the leg
And the joke was played on me.

—Melvin Hester,
Northumberland county, Pa.

ANSWERS TO RIDDLES

1. Footsteps. 2. They were all married.
3. Bottle of wine. 4. The sun. 5. News paper.

PASSING EVENTS IN PICTURES



1. A new and dependable method of measuring the exact quantity of X Rays used in various medical practices has been developed at the Bureau of Standards in Washington.

2. Miss Lucille Gates, who won the American farm girl championship at the Los Angeles County Fair at Pomona from a score or more of skilled farmerettes, in action during the butter churning event.

3. A view of the greatest parade ever seen in Boston (lasting for seven hours)—showing the city's firemen passing under the Triumph Arch in Dock Square in front of the historic "Cradle of Liberty" Faneuil Hall.

4. Securely packed in a strong trunk and guarded by a multitude of seals, an original Gutenberg Bible, printed on vellum and one of the three perfect copies in existence, arrived at the Library of Congress recently from Austria.

This rare volume is a part of the famous Voilbehr collection, recently purchased for \$1,500,000 by an act of Congress, and is reported to have cost its former owner \$250,000, the largest price ever paid for any book.

Frederick William Ashley, Chief Assistant of the Library of Congress, is photographed with the sealed container in which the Bible was received.

5. One of the great observation balloons after it was brought down during the annual British Army maneuvers on Salisbury Plain, near London, England.

6. A new picture of the Coolidge Dam, Phoenix, Arizona, which reveals the impressiveness of the first and only multiple-dam in the world. It is situated about 135 miles southeast of Phoenix and will serve to irrigate 100,000 acres of land along the Gila River.

Farmer's Business Letter

AFTER selling last Monday at the lowest point in 24 years wheat turned up and made a net gain for the week of about 5 cents. Corn and oats were a little higher in sympathy. Everybody seems to be afraid of the long side of the wheat market, and this timidity results in exaggerating the importance of trade factors that ordinarily would be dismissed with scarcely a second thought. This coupled with official (some say political) attention to the Russian wheat "menace" has induced a weakness that will be overcome only by statistical and news developments that are persistently bullish.

At the outside Russia is not expected to have more than 30 million bushels of wheat to export, having so far exported about 18 million bushels. Two months ago December wheat sold over 20 cents above the present price, and there is no reason why it should not be worth as much now. At least there has been no change in the supply or demand situation to warrant such a decline. Italy and France will need to import wheat; the United States and Europe have short feed crops that will result in wheat feeding on this side and inability to substitute other grains for wheat in Europe, to some extent; more bread is used when flour is cheap than when it is high; and so on favorable factors might be recited, and are being set forth, but they make no apparent headway against the aforementioned feeling of uncertainty and lack of confidence. In other words, the great handicap on the wheat market today is a state of mind, and it takes time and favorable developments to overcome that.

Better Feeling in Lamb Trade

A more optimistic feeling is evident in the lamb market, but there is some doubt as to the justification for it. The belief is expressed that should receipts be moderate during the next few weeks a higher level of prices will prevail, though what reason there may be for expecting moderate runs is certainly not evident. About the only apparent basis for this feeling is the best shipping demand in a long time. Both eastern slaughterers and farmers had strongly for lambs this week, and this demand with the supply under a week ago helped to improve prices just a little. But any gain in lamb prices these days is worthy of notice.

The advance was about 25 cents, with a tops up to \$3.35, and the best sorts at the close going to packers at around \$8. However, because of the low market early in the week when receipts were largest the average price for the week was lower at \$7.20, and it is necessary to go back to 1913 to find a lower weekly average price.

Even with a good demand this week feeder lambs sold a little lower, and real good lambs of desirable weight went at around \$6.50. From the standpoint of the future a favorable consideration is the fact that the total number of feeders going to the country is well under a year ago, so far under that there is no likelihood that the difference will be made up by a larger movement from now on. This indicates the probability of fewer fat lambs after the first of the year.

Fall Break in Hogs

The hog market took a big drop early in the week, and in spite of some recovery later closed about 50 cents under a week ago. Average price for the week was \$9, low since August 9, and 65 cents under last week. This decline came even with receipts showing a decrease from the preceding week. The run at eleven points was 304,000, against 424,000 last week, 506,000 the same week last year, and 370,000 two years ago. For the year to date the eleven points have received 19,829,000 hogs, compared with 21,314,000 a year ago, and 22,633,000 two years ago. There is plenty of confidence in the future of hogs, but it is the time of year when the lowest prices are to be expected.

In the futures market trade was quiet after last week's activity. Sales were only 21 loads, against 58 last week. Prices were about the same, with both lights and mediums at \$9 for January delivery.

Dull Trade in Cattle

The run of cattle was large this week, second largest of the year, and trade was slow with prices lower on everything except choice yearlings.

those who put cattle on feed is figured to be favorable.

T. B. Law Upheld

Plain, heavy steers were hit hardest, with the decline on this kind as much as \$1.15. Average steer price for the week was \$10.55, which was 50 cents under last week and \$2.45 under a year ago. Top yearlings brought \$13.15, against \$13 last week, but less than 350 head of cattle brought better than \$12.75, compared with more than 900 last week.

In the feeder division demand has been running fairly strong, with the supply of westerns picking up some. More westerns are expected from now on, and some believe that the most favorable time of the year for such purchases is approaching. The decline in the fat cattle market made available at lower prices some fleshy stuff that under other considerations would have gone for slaughter, and some of this kind were taken out for a short turn at around \$8.50. Thinner cattle of a desirable kind are to be had around \$7, prices ranging up and down from that figure as to weight and quality. The feeder movement so far this season is far behind a year ago at this time, too far behind to ever catch up, and on this basis the outlook for

Iowa's bovine tuberculosis law, including the amendment passed by the last legislature, has withstood another attack in the supreme court, that tribunal again holding the law constitutional in an opinion handed down this week. The opinion held that the bovine tuberculosis law is a health measure in that children and adults contract tuberculosis from milk and, being a health measure, meets the final police power test. If an animal is found to have tuberculosis summary action is essential, and testing is necessary to determine that.

National Swine Show

The National Swine Show, one of the country's largest exhibits of prize hogs, will be held in connection with the Illinois State Fair next year. Plans call for the national show to be combined with the state exhibition as in the past two years at the Indiana State Fair, and premiums are expected to total between \$15,000 and \$20,000. About 2,500 hogs are expected to compete.

Chicago, Oct. 4, 1930 Watson

LIVESTOCK

PITTSBURGH

Cattle

With around 45 carloads on sale on Monday the market was rather active on anything desirable and prices strong to a quarter higher. Best grass steers with weight brought \$9.95, useful kind \$8.50, 8.75 and plainer sort around \$8. Good heavy-weight butchers steers sold at \$8.50, 8.75, not many of that kind being offered. Fair fleshy butchers steers brought \$7.75, ordinary light kind \$7.25, 7.50 and inferior on down. Nothing was bought by feeders, but on carload of fleshy feeders went to a slaughterer at \$7.85. Heifers were generally higher, with good fat sort \$7.50, 7.65 and very decent killers around \$7, fair kind around \$6.50. Few really good fat cows were offered. One pair of young cows brought \$6.50 and a prime heavy cow the same figure, but few were good enough to sell above \$5.50. Canners were all wanted at \$2.50, 3.25, largely \$2.75, 3.00. Bulls were higher, with few nice butcher kind on sale. Estimates indicated about a \$7 top for the market for butcher bulls, bolognas going at \$5.60. Choice grain-fed steers were: None here. Choice steers \$9.00, 9.25. Good to choice, 1,200 lbs. \$8.00, 8.25. Or over \$8.00, 8.25.

Fair to good, 1,200 lbs. \$7.50, 7.75. Plain heavy steers \$7.25, 7.50. Choice heavy-weight steers \$7.50, 7.75. Good butchers steers, 1,000 to 1,150 lbs. \$8.00, 8.50. Fair to good, do. \$7.50, 7.75. Ordinary to fair, do. \$7.00, 7.50. Common, do. \$6.00, 6.50. Good light butcher steers \$7.50, 7.75. Fair to good light steers \$7.25, 7.50. Choice grain-fed steers \$7.50, 7.75. Inferior light steers \$6.00, 6.50. Feeders \$6.00, 6.50. Stockers \$6.00, 6.50. Choice fat cows \$7.00, 7.25. Good to choice heifers \$7.00, 7.25. Fair to good heifers \$6.00, 6.50. Common to fair heifers \$5.00, 6.00. Choice fat cows \$5.00, 6.00. Good to choice cows \$5.00, 6.00. Fair to good cows \$4.50, 5.00. Common to fair cows \$3.50, 4.00. Canners \$2.50, 3.25. Fresh cows, all at side \$2.50, 3.00. Choice heavy bulls \$6.50, 7.00. Choice heavy butcher bulls \$6.00, 6.50. Good heavy bulls \$5.00, 6.00. Fair to good bulls \$4.00, 5.00. Common to fair bulls \$3.00, 4.00. Inferior bulls \$2.00, 3.00.

Monday's Representative Sales

No.	Wt.	Pr.	No.	Wt.	Pr.	No.	Wt.	Pr.
20	1110	9.25	22	1390	9.25	30	1315	9.25
15	1240	8.00	10	1210	8.75	14	1107	8.75
16	1167	8.50	8	1196	8.25	7	1073	8.25
5	1238	8.00	3	1213	8.00	10	1150	8.00
7	1195	7.50	4	1250	7.25	11	1141	7.25
15	917	7.25	7	1073	7.00	18	1075	7.00
7	1171	7.50	20	1290	7.25	13	949	7.00
								6.1000 6.75

(*) Mixed.

Hogs

All hog markets improved late last week and all were higher on Monday of this week. Monday's supply was about 18 double-deck carloads. It included practically no heavy hogs and very few pigs. All classes were higher, good hogs of 160 lbs. and up selling at \$10.90, 11.10, 10.80, 10.45. Some light hogs, 140-150 lbs., brought \$10.50 and best pigs \$10.25. Sows of standard quality went at \$8.75, largely, a few up to \$9.

Heavy \$10.90, 11.00. Medium wts., 150-200 lbs. \$10.90, 11.00. Heavy Yorkers, 165-180 lbs. \$10.90, 11.00. Light Yorkers, 125-150 lbs. \$10.50, 10.75. Pigs, 80-124 lbs. \$10.90, 11.00. Roughs \$9.50, 9.75. Sows \$9.00, 9.25. Steers \$9.00, 9.25.

Sheep and Lambs

There were very few sheep in Monday's

supply of 13 double-deck carloads. Two bunches of these brought \$4.25 per cwt. A few heavy ewes went at \$2.50, 3.00, no good heavy ewes here. Lambs were active and the market steady to strong. Bulk of good lambs brought \$5.75, with bucks and culls out. Heavy buck lambs sold at a discount of a dollar per cwt. or more, hardly ones less. Culls ranged from \$6 to \$7 largely. Medium class of lamb brought \$7.50, 8.00. Very few over-weight lambs have been in this season, in fact many have been a little too light.

Good mixed \$4.00, 4.25. Good to best wethers \$3.00, 4.00. Fair to good, do. \$3.00, 3.50. Common to fair \$2.00, 3.00. Inferior sheep \$1.00, 2.00. Good to choice lambs \$3.00, 4.00. Medium, do. \$2.00, 3.00. Culls and common, do. \$1.00, 2.00.

Calves

With about 700 head on sale the market was unchanged, with top veal calves \$11, seconds largely \$9.11 and inferior \$6.48. Heavy thin calves are hard to sell. A few western calves went to killers at \$9.10.

CHICAGO

Cattle

Chicago, Oct. 6.—Today's supply amounted to 21,000 head. The market was strong. Yearlings sold up to \$13.10. Common to fair steers \$6.00, 8.25. Fair to best yearlings \$7.25, 10.10. Fair to best heavies \$7.50, 12.10. Common to best cows \$4.00, 7.50. Fair to best heifers \$4.00, 11.75. Fair to best bulls \$3.00, 7.50. Canners and cutters \$2.00, 4.00. Veal calves \$9.00, 13.50. Stockers, common to best \$3.50, 9.00. Feeder and feeder to best \$3.00, 9.45. Stocker and feeder cows \$2.00, 7.50. Stocker and feeder cows \$1.25, 5.25.

Receipts totaled about 32,000 head, including 11,000 "directs." The market was 25¢-50¢ higher with top at \$10.45. Bulk sold at \$8.80, 10.25.

Best pigs \$8.50, 9.35. 140-180 lbs. \$8.00, 9.00. 160-180 lbs. \$8.00, 9.00. 180-220 lbs. \$10.00, 10.10. 220-260 lbs. \$10.50, 10.75. 260 lbs. up \$9.00, 10.45. Stage \$9.25, 7.50.

Sheep

Thirty-five thousand sheep and lambs were on sale. The market was steady to a quarter higher. Best native lambs brought \$8.25, westerns \$8.50. Native lambs \$8.00, 8.25. Western lambs \$6.50, 8.50. Feeding lambs \$6.50, 7.00. Wethers \$5.00, 5.00. Yearlings \$3.25, 6.75. Ewes \$1.25, 3.75.

LANCASTER

Cattle

Lancaster, Oct. 6.—Receipts totaled 3,250 head. Market fairly active at steady prices. Bulk of best steers and yearlings sold at \$7.75, 8.50.

With 125 calves on sale best vealers brought \$13.50 per cwt. Medium to good steers, 900 \$8.00, 10.25.

Good heavy steers \$8.25, 10.50. Good to choice heifers \$6.50, 8.00. Common to medium \$5.00, 6.50. Good to choice cows \$4.75, 6.75. Common to medium \$3.00, 4.75. Cutters and canners \$2.00, 3.50. Good to choice bulls \$1.00, 2.00. Common to medium \$0.90, 2.00. Stockers and feeders \$0.85, 2.25.

Hogs

The supply was 173 head. Market steady

to strong. Top hogs, in the 250-lb. class sold at \$11.50.

Good and choice (160-180 lbs.) \$10.75, 11.00. Good and choice (180-200 lbs.) \$11.00, 11.25. Good and choice (200-250 lbs.) \$11.00, 11.25. Good and choice (250-350 lbs.) \$10.75, 11.00. Packing sows \$7.50, 7.50.

Produce Quotations

Butter.—Higher than extra, 42¢-45¢; score, 42¢; 90 score, 37¢.

Eggs.—Fancy select, 36¢-40¢; extra, 36¢; firsts, 26¢; second, 17¢-20¢.

Poultry.—Live fowls, 20¢-25¢; broilers, 20¢-25¢; old roosters, 15¢-18¢; pigeons, 15¢-20¢; ducks, 15¢-18¢; turkeys, 25¢-30¢.

Fruits.—APPLES, N. J. & Pa., 10¢-12¢; CORN, N. J. & Pa., 10¢-12¢; PEARS, N. J. & Pa., 10¢-12¢; PEACHES, N. J. & Pa., 10¢-12¢; PEACHES, N. J. & Pa., 10¢-12¢; PEACHES, N. J. & Pa., 10¢-12¢.

Vegetables.—BEANS, N. J. (snap), 10¢-12¢; green, 10¢-12¢; LIMA BEANS, N. J., 10¢-12¢; BEETS, Pa. & N. J., 10¢-12¢; CARROTS, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Carrots, Pa. & N. J., 10¢-12¢; CELERY, N. J. & Pa., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢; CABBAGE, Pa. & N. J., 10¢-12¢.

Some Chilean Customs

(Continued from page 5.)

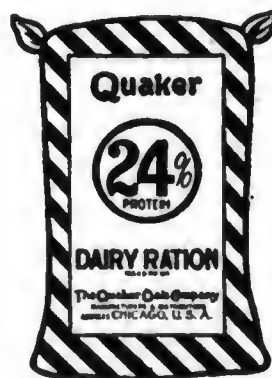
regularly the cash dividends they receive are more frequent. The Club's revenue is derived from the gate and the money bet on the races. No bookmakers are allowed to operate. All betting is by the pari-mutuel system under the control of the Club, which takes out ten per cent of the money bet. Some of this goes to the government, but I cannot say how much, for my information varied with informants and I had no chance to get an official statement. At any rate nobody appears to worry about the amount of the deduction. The taxes don't, because their money is anywhere, and the winners are usually willing to pay.

We had a noonday luncheon at the Club and promptly at 2 p. m. the racing began. Before each race the horses parade in the paddock, where there is plenty of room for all to see them. Then they go to the course, and after a brief delay at the barrier they are away to a beautiful start. I have never seen a more competent starter than the one officiating there.

He gave us a prompt and wonderful lesson in every race. But the horses run "the other way" around the track. Our race horses go



Let Your Cows Pass on their own Feed Question



COWS relish food that is good for them. You'll find Quaker 24% Dairy Ration particularly pleasing to your herd because of the choice palatable ingredients and the molasses in dry form. This valuable ingredient is combined with essential minerals and other elements that keep cows in top condition. Mixes well with your own home grown grains. Feed Quaker 24% Dairy Ration and note improved appetites and increased production. Bigger profits—of course! Ask your Quaker Dealer.

THE QUAKER OATS COMPANY, CHICAGO, U. S. A.

Quaker Sugared Schumacher—is the complete carbohydrate feed; combines perfectly with any Quaker high protein concentrate (24%, 20% or 16%). A choice feed for all young or dry stock; an entire grain ration for horses, steers, lambs and swine

BUY QUAKER FEEDS IN STRIPED SACKS

Cow-Testing Ass'n Reports

Indiana County

THE Indiana County Cow-Testing Association finished its fourth year June 1, 1930, with 28 whole-year members and two part-year members. There were 423 cows in the Association during all or part of the year. The results for the four years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1927	262.42	7563	305.4
1928	274.72	7143	287.7
1929	285.01	7476	310.7
1930	324.36	7966	340.0

Twenty-three herds with an average of five or more cows produced an average of over 300 pounds of butterfat. A complete list follows:

Owner	Breed	Milk	Fat
Wm. S. Wetzel	R.&G.J.	9082	483.3
John C. Walker	G.J.	7499	406.5
Clyde Houck	R.&G.J.	8064	405.8
H. H. Wetzel & Son	R.&G.J.	7701	405.8
Indiana Co. Home	R.&G.H.	11577	594.3
I. M. Speedy	Mixed	9109	387.1
C. F. Glasser	R.&G.J.	7803	377.7
Quay McMillen	Mixed	7786	372.7
Clark Steele	R.&G.J.	7354	364.4
Carl Walker	R.&G.J.	6962	364.1
L. W. Robinson, Jr.	R.G.	7480	352.6
H. O. Kimmel	R.H.	10017	342.4
Clarence D. Bence	R.&G.J.	6839	336.1
H. W. Munau	R.&G.J.	6837	334.2
H. M. Travis	Mixed	7940	332.6
John F. Glasser	R.&G.J.	6411	332.6
W. F. Barkley	G.G.&G.H.	7985	318.1
Torrance State Hospital	R.H.	10048	316.7
C. S. Gerhard	R.H.	9055	308.7
C. C. Stockdale	Mixed	6870	307.7
John G. Henderson	R.G.	6197	306.7
C. A. Wingard	R.&G.J.	6382	303.8
C. F. Allen	Mixed	6550	300.1

Carl Johnston, J. W. Warner, Tester. County Agent.

Montgomery County

THE Montgomery County Cow-Testing Association No. 1 finished its sixth year with 20 whole-year and two part-year members. There were 560 cows in the Association during all or part of the year. The results for the six years' testing are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1925	331.65	7563	281.2
1926	330.10	7359	283.9
1927	319.10	7391	305.3
1928	391.24	8138	309.2
1929	431.01	7981	313.6
1930	400.42	8083	324.0

Sixteen herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Milk	Fat
Shipley School	R.G.	5335	418.7
Owen S. Gerbard	R.H.	11577	414.4
Levi Schultz Est.	R.H.	11581	395.2
C. E. Allebach	R.H.	10507	369.0
E. C. Longacre	R.H.	10303	364.0
Compton Farm	R.J.	6298	360.2
Howard Baker	R.H.	9355	349.5
W. C. Randolph	R.J.	6749	342.7
Wm. F. Pfrommer	R.&G.H.	9376	342.1
Urethia College	R.H.	9507	333.0
C. Wm. Haywood	R.J.	6229	331.6
Willow Creek Farm	R.G.	6991	329.2
Gwynnlan Farm	R.G.	6447	322.7
Normandy Farm	R.A.	8082	322.4
Mrs. Howard Bieler	R.&G.H.	9357	317.0
A. K. Rothenberger	R.H.	9030	307.8

P. F. Peabody, R. G. Waltz, Tester. County Agent.

Fayette County

THE Fayette County Cow-Testing Association finished its second year June 1, 1930, with 14 whole-year and three part-year members. There were 421 cows in the Association during all or part of the year. The results for the two years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1929	357.0	7069	316.6
1930	294.85	7576	316.9

Six herds with an average of five or more cows produced an average of over 300 pounds of butterfat. A complete list follows:

Owner	Breed	Milk	Fat
Oak Hill Estate	R.G.	7651	371.0
J. Espy Lynn	G.G.&G.H.	8267	364.6
E. E. Arnold	R.&G.H.	10956	361.7
Frank S. Laughhead	Mixed	7621	351.3
Whysel Farm	Mixed	8124	336.9
W. H. Blaney	Mixed	8669	312.2

James Hartzfeld, C. D. Ubel, Tester. County Agent.

Blair County

THE Blair County Cow-Testing Association finished its second year June 1, 1930, with 23 whole-year members. There were 313 cows in the Association during all or part of the year. The results for the two years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1929	301.36	6925	273.4
1930	315.83	7926	310.7

Fifteen herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Milk	Fat
W. T. Kephart	R.&G.H.	10737	403.1
Emory Sollenberger	R.&G.H.	10171	388.3
F. H. Mattern	Mixed	9083	353.3
Emory Brumbaugh	G.H.&G.J.	9230	348.3
G. E. Stultz	R.&G.G.	8116	344.3
K. S. Bagshaw	R.B.S.	8332	344.3
R. A. Easter	Mixed	8357	344.3
J. M. Delozier	R.B.S.	8342	329.4
Emory T. Huntsman	Mixed	8774	321.2
P. C. Smith	R.&G.H.	9334	320.7
G. C. Smith	R.&G.H.	9341	320.3
John Lloyd	R.&G.G.	6332	313.1
J. Edgar Black	G.H.&G.G.	7415	313.1
Thurman Hileman	G.B.S.	7847	313.2
J. M. Hoffman	Mixed	7599	303.3

Wilfred Brumbaugh, E. G. Hamill, Tester. County Agent.

Wattsburg

THE Wattsburg Cow-Testing Association finished its fourth year with 25 whole-year members. There were 471 cows in the Association during all or part of the year. The results for the four years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1927	370.17	7024	253.1
1928	403.94	7226	261.3
1929	401.80	7563	273.7
1930	390.50	8028	283.3

Ten herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Milk	Fat
Williams Bros.	R.&G.H.	10810	374.3
Scared Heart Mission	R.H.	8890	343.3
Carl Stowe	R.&G.H.	8241	323.3
Carl Proctor	R.&G.H.	9158	323.3
Geo. Robinson	R.&G.H.	9118	320.3
Paul Dennee	Mixed	7842	313.3
County Home Farm	G.H.	8234	313.3
Gordon Poles	R.H.	8338	309.4
Gerald Johnson	R.&G.H.	8922	304.4
Hazen C. Folett	R.H.	9263	304.7

J. Taft Williams, P. S. Crossman, Tester. County Agent.

Butler County

THE Butler County Cow-Testing Association finished its sixth year with thirty-one whole-year members. In addition one member was in the Association part of the year. There were 442 cows in the Association during all or part of the year.

Individual Herd Records

Twenty-one herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Milk	Fat
C. F. Edgar	R.G.	10712	387.9
J. C. Roberts, Jr.	R.&G.H.	10712	387.9
H. P. Starr	R.H.	10255	354.4
D. L. Hartzell	R.H.	10255	354.4
J. C. Hendricks	Mixed	8288	354.4
Charles Martin	R.&G.H.	9609	354.4
John L. Wise	R.G.	7634	341.9
A. J. Lang	R.H.	9964	338.4
Henry Reefer	R.G.	6756	337.4
Ira L. Cleland	R.&G.J.	6907	337.4
Thomas Cowser	R.J.	6290	330.6
R. N. Dickey	R.&G.H.	7285	328.3
E. P. Gifford	R.&G.H.	9969	323.3
S. S. Cleland	R.J.	6940	323.3
C. R. Gaertner	G.H.&G.J.	8257	323.3
J. H. Moser & Sons	R.G.	6309	312.4
C. F. Laderer	R.J.	6463	309.3
W. F. Saegar & Son	Mixed	6712	304.2
J. P. Barkley	R.J.	6213	304.2

G. J. Hock, R. H. McDougall, Tester. County Agent.

Jolt Made Him Think

By L. W. LIGHTY

"FOR a long time I read what you and others said about permanent pasture," writes a farmer, "but I felt it paid better to keep my land under the plow and grow the regular grain and grass crops. Seventy-cent wheat has so upset this notion of mine that I am planning to lay down a fourth of my farm into permanent pasture. At one edge of the farm a spring stream flows in and out for about 300 yards and here is a three-acre woodlot which was our pasture. I now propose to cut out of the farm 32 acres adjacent to this lot and turn it into permanent pasture and I ask your help." This central Pennsylvania man sends me a draft of his farm. I hope seventy-cent wheat will make a lot of other folks think along more profitable lines. Good, well-cared-for pastures always was profitable and in this time of overproduction it is more profitable than ever.

Preparation for Pasture
For permanence we are dependent on bluegrass and this plant requires lime and phosphorus. Like all useful plants it thrives best in a soil rich in organic matter. I therefore suggested to my friend that he plow a sod if possible, or, lacking a sod, apply a covering of stable manure. Plow this autumn rather deep, setting the plow so the furrow slices are set on edge and not turned over flat. This to prevent erosion, give the freezing a chance to do good work in pulverizing the soil and make conditions more favorable to prepare a good seedbed next spring.

The lime may be applied at once after plowing or in the spring before seeding the grass seed. The fertilizer should be applied at the time of seeding the grass seed. Fall plowing is preferable to spring plowing in laying down a pasture. You can make a farmer and finer seedbed and also sow earlier. All hardy grasses are early spring growers when there is moisture and not such high temperature.

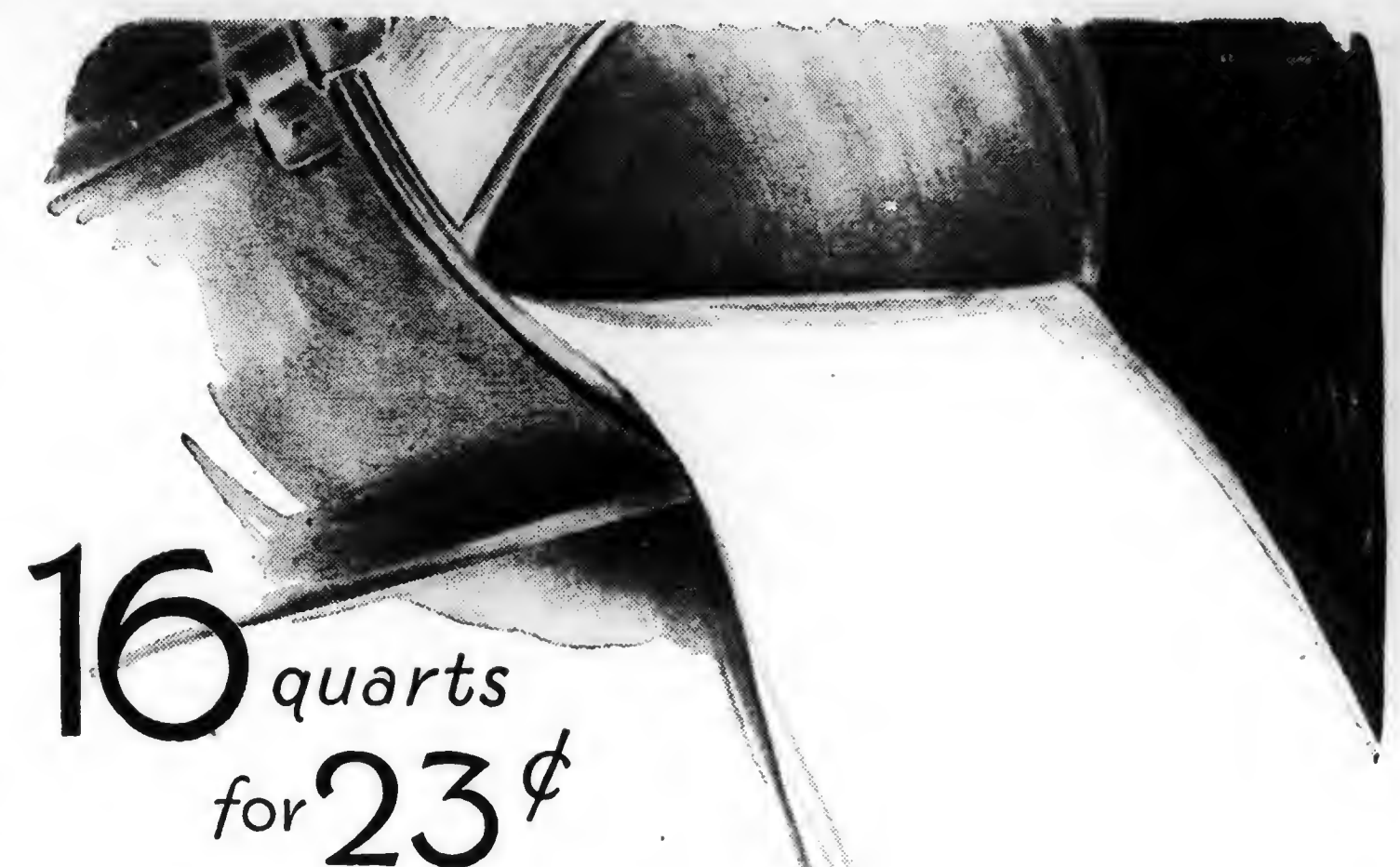
When we prepare an area for permanent pasture we should remember that the land may not be plowed and tilled for many years and therefore it is well to do the best possible job while at it.

The Pasture Grasses
The old formula I have often given has never failed in producing quick pasture as well as permanent pasture.

To each acre we allow eight pounds Kentucky bluegrass, four pounds Canada bluegrass, six pounds each of timothy and red clover, three pounds each of alsike and redtop and one pound of white clover. This covers the ground well from the start and erosion soon is impossible. We have pasture in fair abundance the first year and yearly thereafter. This seed should be sown on a well-plowed very firm in the subsurface and fine on the surface. The earlier we can get this condition the better. The seed should be covered light.

Emergency and Temporary
Such pastures may be a necessary evil, but with a good and ample permanent pasture area temporary pastures are rarely necessary. We may use rye, wheat and winter vetch for early pasture and Sudan grass, soy beans, sorghum and cowpeas for late pastures.

The greatest drawback is too often we have heavy rains and the newly sown and tilled ground is very soft for days at a time. Cattle tramp it when we plow it the next time it breaks up in hard lumps that often cannot be pulverized. It is one method of ruining the soil so that the following season it yields poorly. Temporary pasture requires too much work. It is an annual pasture making, while with the permanent pasture we do the work and make the seeding expense only once in many years, often for a lifetime. Permanent pastures are far more economical than temporary ones.



MILK...16 quarts for 23c. This bargain is in your very town...in a bag at The Store With the Checkerboard Sign. In this bag are 100 pounds of Purina Cow Chows. In the average 100 pounds of Purina Cow Chows are 16 more quarts of milk than are in the average bag of more than 130 other feeds. This bag of Purina Cow Chows costs an average of 23c more than the average bag of these other feeds. 16 quarts for 23c. These are the figures which come from a recent national farm-to-farm feed survey of 18 months...a survey of 505,536 cows...a survey covering 48 states...a survey conducted by 870 men...a survey still going on.

When you buy feed for your cows you are buying milk in a bag. Consider, then, what a bargain you get in a 100-pound bag of Purina Cow Chows...113 quarts of milk...all in 100 pounds of feed and the roughage that goes with it. 16 of these quarts are extra...16 quarts which cost only 23c...just a bit more than one penny per quart...what a bargain!

A bargain which is all yours when you are feeding Purina Cow Chows...a bargain which is waiting for you any time you happen into town...waiting in Checkerboard Bags at The Store With the Checkerboard Sign. Purina Mills, 998 Gratiot Street, Saint Louis, Missouri.

THE PURINA COW CHOWS

BULKY COW CHOW	24% COW CHOW	FITTING CHOW
20% COW CHOW	34% COW CHOW	CALF CHOW
	BULKY LAS	

1872-Fifty-eight years of Satisfaction-1930

The Tornado Dry Fodder Cutter Strong, Durable, Mechanically Built, Not continually breaking, cuts finer. Puts fodder in better feeding condition than any cutter in America.

PRICES RIGHT. Can save you money. Write us today.

The W. R. HARRISON CO. Manufacturers Massillon, Ohio

Sale of Valuable Herd of DAIRY CATTLE

Guernsey and Ayrshire Over 100 Head

Registered and Grades. Federal Accredited.

THURSDAY, OCTOBER 16th, 1930

At Farms along William Penn Highway - Near Hummelstown, Dauphin County, Penna.

Also Sundry Farm Machinery and Equipment - 4 Mules, 12 Horses

Sale to commence at 10 o'clock A.M.

BOLTON FARMS, HUMMELSTOWN, PA.

EDWARD STOVER Auctioneer, A. B. SHENK, Clerk

DAIRY CATTLE

For Sale. Jersey Bull Calf

Ready for light service. Dropped Oct. 3, 1929. Dam dropped 4 calves and produced 1,304 lbs. fat (C.T.A. records) in 4 years, starting at 2 years 4 mos. of age. This calf won 1st in class and grand championship at Grove City Dairy Show this fall. Price \$135.00 delivered. Two younger bulls at correspondingly lower prices, one from silver medal dam. Accredited herd. JAY D. BAKER, R. 4, Grove City, Pa.

GUERNSEY BULLS

11 and 23 months of age. Registered. Accredited. R. 2, Conestoga, Pa.

VERY PROMISING, well grown, 2-dut Jersey heifer 7 mos. and one bull 6 mos. Price \$100.00 each. W. F. McFARRAN, Tumbler, Pa.

AYRSHIRE CATTLE of the best blood lines. Fred T. B. Ayer's Animals, 414 Chestnut St., Philadelphia, Pa.

For Sale 11 Guernsey and 12 Ayrshire cows, also 1 bull. Price \$100.00 each. Fred T. B. Ayer's Animals, 414 Chestnut St., Philadelphia, Pa.

For Sale 11 Guernsey and 12 Ayrshire cows, also 1 bull. Price \$100.00 each. Fred T. B. Ayer's Animals, 414 Chestnut St., Philadelphia, Pa.

Please Mention Pennsylvania Farmer When Writing to Advertisers

FARM LAND
PENNSYLVANIA

\$10,850 YEARS INCOME.—Concrete Highway. Edge Village, 130 acres rich black land, clay subsoil, cuts about 80 tons hay, corn, potatoes and wheat profitable too. 50 fruit trees, wood and timber. Attractive 8-room residence, electricity, bath, furnace, gas available. Beautiful shade and valley view. Dandy 35-cv. barn, 2 silos, 3-car garage, big big house, poultry house and tennis house. Splendid location for auto inn, gas station, etc. Present owner here 19 years, low price \$22,000, third cash. If taken, soon include the 100-acre dairy herd, hens, pigs, tractor, truck, full modern tools and equipment, electric separator, milking machine, hay, silage grain, etc., etc. Write for pictures. S. B. Bogle, Owner, 44 Columbia Ave., Greenville, Pa.

MISCELLANEOUS LANDS

STROUTS NEW FREE CATALOG.—\$400 80-cv. 244-Acre Farm. Near village, fruit, wood, land, trout stream, sunning place. See picture pg. 97. Strouts catalog big 10-story 10-room house and good 64-ft. barn. Insurance \$1,800. Owner called away returns price to \$1,400 with \$400 down. A dandy for farming, fishing and hunting.

288 ACRES, 3 HORSES, 14 COWS, young stock, bull, hock hens, long list machinery and vehicles, crops included to settle quickly on macadam highway. 1 1/2 miles village, great farming country, valuable woodland, brown pasture, fruit and 200 sugar maples; 7-room home, 70-foot barn, other buildings. Aged owners quick sale price \$4,500, part cash; pg. 52 big new Free catalog 1,000 bargains. Strout Agency, 1422-BE, Land Title Bldg., Philadelphia, Pa.

OWN A FARM IN MINNESOTA, DAKOTA, MONTANA, IOWA, WASHINGTON, OR OREGON. Crop payment or easy terms. Free literature; mention state. H. W. Eyerly, 33 Northern Pacific Railway, St. Paul, Minn.

SHEEP

Delaine Breeding Ewes in lots to suit the purchaser. Also cross-bred ewes, feeding and lambing. Now is the time to buy. J. B. & J. R. HENDERSON, Hickory, Pa.

DELAINE RAMS

As fine as grow. Shipped on approval. E. H. Russell, Box 39, Wakarusa, Ohio

DELAINE MERINOS of the Champion strain. Pure type, type, breeders. Write for literature. B. S. SANDERS, R. 2, Ashtabula, Ohio

REGISTERED SHROPSHIRE.—Vigorous, well-grown rams of good type. Priced very reasonable. A. F. MEKELL, Geneva, Ohio

THIRTY REGISTERED SHROPSHIRE, one and two-year-old rams, bred by our imported rams. MYLMED FARM, Beaver, Pa.

REGISTERED SHROPSHIRE RAMS from imported ancestry.

L. M. HEIGER, Buffalo, Ohio

SHROPSHIRE AND OXFORD RAMS for sale. Registry papers furnished. Priced reasonable. BROCKETT FARMS, Atwater, Ohio

SHROPSHIRE AND OXFORD RAMS. 25 on hand, guaranteed.

PIONEER STOCK FARM, Agassiz, Ohio

A few choice

Southdown Rams for Sale

Address W. D. NOBLE, Boston, Summit Co., Ohio

Fancy Southdown Rams and Ewes from one of the oldest breeders in Ohio, at reasonable prices.

A. T. FREED & SON, Basil, Ohio

REG. HAMPSHIRE DOWN RAM, 1 year old.

Good individual, with best of breeding.

H. W. ALLISON, Mercer, Pa.

SWINE

Chester White Pigs—6 weeks old, \$4.00. For breeding \$6.00 each. Mixed bred pigs, \$3.75. C. LEWIS TAYLOR, Wyalusing, Pa.

125 BIG TYPE, pedigree Chester Whites from big breeders and big blood. Priced right and shipped on approval. C. E. Cassel, Hershey, Pa.

Feeding Pigs, 15 to 20 lbs., \$4.50 to \$5.00 according to size. Truck delivery on large lots. Mostly Poland-Chinas. Stanley Short, Cheswold, Del.

HAMPSHIRE PIGS Eight weeks old, all ages.

J. J. RAILING, R. 2, Shippensburg, Pa.

LARGE BERKSHIRES both sexes

usually for sale. Ditta & German, Rossville, Ohio

Registered POLAND CHINAS

2 mos. old. Shipped on approval, express paid. \$12.00 each. LYNN PETERS, Woodland, Pa.

HORSES

ANNUAL PUBLIC SALE PERCHERON MARES. Fillies Young Stallions, Wednesday, Oct. 29

Whitehall, Illinois

W. S. CORSA, Whitehall, Illinois

CATTLE

BUCK & DOE RUN VALLEY FARMS Hereford Cattle—Poland-China Hogs—Hampshire Pigs—Draft Horses. THE SAINT MARY COMPANY, Mortonville, Penna.

Angus Cattle at reasonable prices

Write BAYARD BROS., Waynesburg, Pa.

Advertised merchandise means definite savings

Advertisements tell you what a product will do, where it can be had, and how much it will cost. When you find yourself in need of a pair of boots, an engine, a new stove—anything—pick up the PENNSYLVANIA FARMER and read the "ads." They will tell you what you can get and what you will receive before you get it.

Farm Readjustment

(Continued from page 5.)

1889 to 1899—the decade of extremely low prices—than in any other corresponding period during the past century. The index of productivity based on acre yields was increased from 91 to 103, a gain of 12 points which is the same number of points gained as occurred from 1909 to 1929. Even a more striking point: The improvement in acre yields in the past 20 years was accompanied partly by the elimination of approximately 600,000 acres of apparently submarginal cultivated land, while the increase in yields during the 90's was secured with the switching of only 300,000 acres of land away from the principal field crops. Some of this acreage apparently was utilized in the production of fruits and vegetables.

One very evident result of the prevailing low prices for grain and livestock during the 90's was the greater consideration given to fruit and vegetable cultivation. In 1889 Pennsylvania had 9,097,700 bearing apple trees and ranked tenth in production. Within ten years, the number of bearing trees increased to 11,774,211—the highest number on record—and Pennsylvania became the second greatest apple-producing state in America. The statistics on peaches tell a similar story. The number of bearing trees increased from 1,145,970 in 1889 to 3,521,800 in 1899 which, with one exception, is the highest on record.

Fruits and Vegetables

A phenomenal increase took place in the production of small fruits and market garden products. The value of these products amounted to \$1,455,457 in 1889 and increased to \$5,264,528 in 1899. Since the price level was about the same in 1889 as in 1899, a threefold increase in production is indicated. The fact that there was an increase of around 230,000 acres of improved land not growing the principal field crops during the period and also that there was a pronounced increase in number of farms under 20 acres, suggests further the possibility that great emphasis was given to the cultivation of fruits and vegetables during this decade.

The most astonishing feature in the agricultural improvement that took place during the "hard-time" period was the fact that the progress was made without the stimulus of increasing land values. The value of farm property actually decreased from \$922,240,233 to \$698,272,750 during the ten years.

During prolonged periods of falling prices, great hardships are encountered in agriculture due in part to the fact that costs of production are contracted on a higher price level than that prevailing when the commodities are sold six months, a year or two years hence. Once the price level has become stable and tends upward, the situation reverses itself and farmers are placed in a much more favorable position.

When Yields Decreased

Whether it is a coincidence, a result of economic conditions, or some other cause, the point is nevertheless worth observing that from 1869 to 1889—a period of falling prices—acre yields of the principal field crops grown in Pennsylvania decreased approximately ten per cent. The most rapid decrease in these yields was between 1879 and 1889, the second decade of the price decline. Once the price level had become somewhat stable, however, soon after 1889, the situation was changed entirely and within ten years, acre yields were increased more than they had decreased during the previous 20 years. One great advantage enjoyed by farmers in the 90's which has not been available to Pennsylvania farmers since the World War was an equitable purchasing power when compared with

other industries. The ratio of prices received for agricultural products to prices paid for other commodities was approximately 100 for the 1890-1899 period while for the 1920-1929 decade, the ratio averaged only about 87.

There have been times when farmers had to stretch almost to the breaking point their indomitable courage and perseverance. This was the case during the 80's and early 90's as many readers of the Pennsylvania Farmer can well remember.

Years of declining prices carried corn down to 33 cents per bushel, wheat to 56 cents, rye to 43 cents, buckwheat to 38 cents, potatoes to 27 cents and hay to \$7.90 a ton. But chasing power when compared with

What Will Potatoes Bring

(Continued from page 5.)

on the price to the grower on December 1st as given by the U. S. Department of Agriculture. During the past six years this advantage has averaged over 19c a bushel but there are doubtless times when this advantage would be less and others when it was larger. This nearness to markets has certain drawbacks, the chief of which is that it results in careless grading and packing, as well as unorganized marketing.

The grower's problem is how, when and where to sell the potatoes that he is growing and under Pennsylvania conditions this is largely an individual problem. A short crop year with prospects of easy money attracts the unscrupulous and crooked buyer. These men operate in a variety of ways, but it is generally based on a promise of high returns with the farmer taking all the risks.

Local markets offer good outlets for much of the Pennsylvania crop and the grower should figure expenses and comparative returns carefully before shipping to a distant market. A lower price at a home market may be more profitable than a higher price on a city market. Many Pennsylvania potatoes are handled on commission in the city markets and this is a fairly satisfactory method of selling, provided the commission merchant is reliable. The grower's local bank can tell him whether he is a good risk before he ships. There are many reliable commission houses and local buyers and the honest ones will not be embarrassed by investigation or a discussion of terms.

The Hardest Problem

When to sell is the hardest problem. The chances for gain by storing or holding potatoes are greater in a short crop year. One danger in this practice, especially in a year when industrial conditions are poor, is that the price will be pushed up to a point where consumption is cut. This condition sometimes results in a surplus of stock at the end of the season which must be sacrificed at low prices.

During the harvesting season supplies are heavy in the city markets and a real advance is rarely recorded until the digging season has passed. Even in 1925, the year of high prices, the market declined during September, held about steady in October and advanced sharply in November. In some years there has been no material advance in prices until March or April and it is expensive to hold potatoes that long. There is a tendency for growers to hold their potatoes on a rising market in hopes of selling at the peak but no one knows when the highest point has been reached. The best policy is to sell on a rising market and not to try to get the last penny of the advance, for when prices reach the top they generally drop rapidly.

this proved to be the darkness before the dawn. It proved to be, as subsequent trends now reveal it, the opportune time in 80 years to chase good farm land as an investment.

The price of corn climbed steadily from 1896 to its peak to \$1.95 during the World War, wheat from 56 cents to \$2.16, etc. The average value farm property per farm increased from its low point of \$4,690 in 1909 to \$5,715 in 1910 and \$8,551 in 1920. Thus, the blackest period in the economic history of Pennsylvania agriculture turned out to be the brightest from the standpoint of the young man who purchased good land in spite of all advice to the contrary—prophecies of mortgage foreclosures, financial ruin—based on the experience through which thousands had just gone, and set out to farm earnestly and intelligently with hope rather than memories as his guide.

Prices fluctuate more rapidly in short crop year and the grower must keep closely informed on many conditions and prices. The radio and the newspaper give daily prices and the potato report issued by the Philadelphia office of the U. S. Department of Agriculture contains complete information. This can be obtained by writing to Mr. J. G. Scott, Room 236, Municipal Pier No. 2, South, Philadelphia, or to the Pennsylvania Farmer. To learn the market from market reports they should keep and the changes from day to day and week to week noted. It will show whether the trend of the market is up or down and will help the grower in his selling.

A year of crop shortage brings many potatoes on the market which would not be marketed in a normal season, but the premiums paid for stock of good quality are higher. The Pennsylvania grower that plans to sell his potatoes on a large city market will find careful grading and chisels even more profitable than in an average season.

Free Fair Attracts

THE Kanawha Exposition and State Four-H Fair, which has become known as West Virginia's great free fair, was visited and viewed by the largest number of people in its history during the eight days from September 29th to October 7th, estimated at 100,000.

Opening on Monday the first day was devoted largely to getting exhibits in place. Monday evening 75 members of boys' and girls' clubs from eight counties, two Future Farmer chapters and fifty men and women representing five community council organizations were banqueted and entertained.

Tuesday the Four-H Club members competed in various judging and demonstration contests. The dairy products demonstration team from Mason county received unusually favorable comment and compliment for their work. Leon Community Council, also from Mason county, won first place for a community program exhibit.

The poultry show filled one large building and was of exceptionally good quality as well as large in number. Dairying also receives a good share of attention with exhibits of dairy clubs, dairy herds and products. The major portion of the livestock exhibits were those of Four-H Club members in calf, pig and sheep projects. An exceptionally fine exhibit of baby beavers was made by the Future Farmer club of Greenbrier county under the leadership of French Mills county agent. These steers will be shown at the Baltimore Livestock Show the week of October 13th.

Earle G. Reel

HAY AND GRAIN

SALE.—Alfalfa, Timothy, Clover Mixed. Prices quoted. Write us. John Devlin Co., 192 North Clark Street, Chicago, Ill.

PRINTING

ADVERTISING IN FARM PRINTING that gets it goes. Write for literature. Printcraft Co., 192 North Clark Street, Chicago, Ill.

DOGS

ANDALUSIAN DOGS.—Blue Andalusian dogs and puppies. Seibert Bros., Elizabeth, Pa.

RABBITS

ANDALUSIAN DOGS.—Blue Andalusian dogs and puppies. Seibert Bros., Elizabeth, Pa.

WANTED

WANTED.—Sets and classics especially. Write for literature. Printcraft Co., 192 North Clark Street, Chicago, Ill.

SITUATIONS

EXPERIENCED FARMER with family ready to leave farm near Pittsburgh and good salary, depending on position. Box 172, Pennsylvania Farmer, Pittsburgh.

HAY AND GRAIN WANTED

WANTED.—Hay, Grain, Potatoes, Apples, Cabbages, Carrots, etc. Write for literature. Printcraft Co., 192 North Clark Street, Chicago, Ill.

AGENTS

MILTON NURSERY. Rochester, N. Y., established 1865, wants reliable men to take this winter for its "first prize-winning" seedlings, including bushes, trees, Free 2-year guarantee. Free outfit. Part of time, day weekly.

WANTED.—Representatives for part time work. All daylilies and poultryman products. Repeat business. Arthur B. Morgan, 109 New Court, Huntington, West Virginia.

MISCELLANEOUS

FOR SALE.—The Bull, when your cow does not breed. Use Cow Catch 1 hour before service. \$1.50 for five cows, postpaid. Woodstock, Box 2, Box 58, C. Newton, Washington.

LOTUS SHIRTS. PAINTED. Hemsomable. S. K. Liberty, New York.

ROOFING. A ply. \$1.35 per roll. Prepaid. For circular. Whittier Bros., Mills, Mass.

BARN EQUIPMENT

STANCHIONS. are guaranteed to be the purchaser. They are shipped subject to the buyer's stable. They are made of steel partitions, stalls and stanchions. Litter and Feed Carriers, and other equipment. Send for booklet. Winthrop Barber, East Street, Forestville, Conn.

EDUCATIONAL

WANTED IMMEDIATELY. MEN—WOMEN, 18-35, for Government Jobs, \$125-\$200. Steady employment; paid vacations; comm. situation; sufficient. Thousands Needed. Write: Government Institute, 586, St. Louis, Mo.

HONEY

HONEY CLOVER.—Honeywood, extracted and bottled. Satisfaction guaranteed. E. D. Jones, Columbia Cross Roads, Pa.

PURE HONEY.—Clover or buckwheat, pure, 1 lb. postpaid. Satisfaction guaranteed. W. C. Long, Millville, Pa.

HONEY.—Five lb. postpaid. \$1.25; 10 lbs., \$2.40. Extracted or bulk comb. Ed. Mitchell, Millville, Ohio.

LADDERS

EXTENSION LADDERS. 10 to 60 feet. Description, circulars, prepaid. Prices, prompt. Write: Patton, Jewett, Ohio.

Farm Conditions

Blair Co., Central Pa.

Sept. 25: Still hot and dry, we have light showers occasionally but ground soon dries off. Most corn is cut and some are hauling their seed is scarce on most farms. There is some wheat sown and still lots to sow. The potato crop is rather uncertain some patches yielding well and others poorly, also some damaged by grub worms. H. E. Hetrick.

Wirt Co., N. W. W. Va.

Sept. 15: Weather hot and cloudy. Need rain. Late stuff looking bad. A good rain would do a lot of good. Springs and creeks about dry. Cattle about all sold. Veals 12c, cream 40c, butter 40c/50c, eggs 30c. A lot of hens being sold at 15c/22c. Potatoes \$1.25, oats 70c. Schools all started with good attendance. Farms seem to be a better sale now. E. N. B.

Franklin Co., Southern Pa.

Sept. 15: We have encountered one of the longest dry periods in scores of years. Vegetation seriously affected. Poor corn and pastures in years. Feed ready sale. An ordinary potato crop. Few apples. Some plowing remains to be done yet. Threshing fairly well rounded up. Few have sown some fall grain. Quite a few have sown rye as a preparation for spring silos, some preparing to seed. Eggs 26c, wheat 84c, shelled corn \$1.25. Importation of feeds is in progress into this county at the benefit of reduced freight rates. John B. Shank.

Radio Notes

Because of past success and cooperation of farm interests the National Farm and Home Hour has been lengthened to a full hour beginning 11:30, central standard time. The National Farm and Home Hour pick-up will broadcast the Country Life Conference at Madison, Wisconsin, October 13-17 inclusive. Dairy Show periods are noon to 12:15 each day direct from show ring. Interspersing the Dairy Show program will be musical selections by Harry Kogen and his band of Home-standers, the orchestra which is a daily feature of the National Farm and Home Hour.

Five-minute daily news periods for the United States Daily will be heard as usual from Washington. The special broadcast direct from the St. Louis exposition is brought to National Farm and Home Hour listeners over stations associated with the National Broadcasting Company as a part of the plan to make the program of greatest possible value and interest to listeners. It is but one of the several leading agricultural activities to be covered this fall. Other periods of nationwide interest to be heard are the National Farm and Home Hour, the National Canning Convention, Norton county, Kansas, November 14; and the International Livestock Exposition, Chicago, December 1-5.

Bulletin on Maritimes

From an illustrated pocket-size booklet on the Maritime Provinces of Canada, recently published by the Department of the Interior, the reader can acquire much authoritative information about the progress and potentialities of New Brunswick, Nova Scotia and Prince Edward Island, their principal resources and development.

The wealth of these provinces has been overlooked during the growth of western Canada and the industrial expansion of Ontario and Quebec, and now they are receiving recognition to which their resources in agricultural lands, forests and fur-bearing animals, minerals, fisheries and water-powers rightly entitle them.

This 79-page booklet can be obtained from the Director, National Development Bureau, Department of the Interior, Ottawa, Canada.

4 Acres—A Case Where Sympathy Was Superfluous



By Leet

Before you

Build....



WITHIN the next few months, thousands of farmers who are now reading this advertisement, are going to build new or remodel their old Barns, Poultry Houses or Hog Houses.

One year from now some of these same farmers will be saying, "I wish I had consulted Jamesway about my buildings — there are so many things about it that I'd like to have different."

Most of these thousands of farmers however are going to have a different story to tell — because **most** of them will write to Jamesway **FIRST** — their experience will be one of life-long satisfaction. Consulting Jamesway on any Building, Remodeling, Ventilating or Equipping problem is the sure way to save yourself regrets later on.

It makes no difference how large or how small a job you have, Jamesway can show you how to do it better — how to economize on cost and material — how to arrange it so that you are saved dozens of steps every day in the year — how to build so that you will continue year after year to get the greatest return from your investment.

Greater profit from farm animals is best accomplished by increasing the return per animal with the least amount of care and labor. For more than 25 years Jamesway Dairy and Poultry Experts have been working and developing better methods of housing, heating, insulating, ventilating, and equipping for farm stock — how to do it in the best and most economical way.

All of this vast experience has been compiled in this New Book and we now offer to you the most up-to-date, practical and helpful information on the subject that can be obtained. It's yours free for the asking. Mail coupon today.

Remodel..

Ventilate..

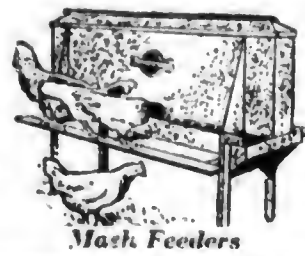
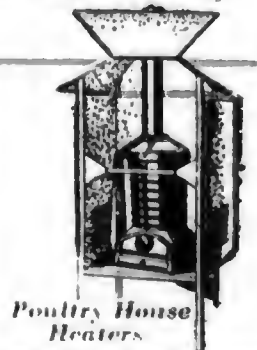
or Equip....

any Farm Building

Be Sure
to Send
for this
**FREE
BOOK**

Jamesway

James Manufacturing Company
Ft. Atkinson, Wis. Elmira, N. Y.
Minneapolis, Minn.
JAMESWAY LTD., Weston, Ont., Canada



Poultry House Heaters

Metal Nests

Math Feeders

Heated Waterers

When you build you naturally want the best building you can get for the least money. Jamesway with a quarter of a century experience in planning better farm buildings is the largest and best equipped organization of its kind to help you with your building problem.

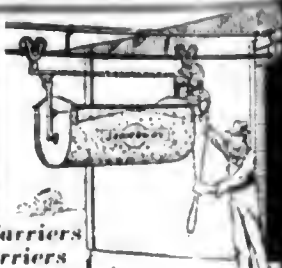
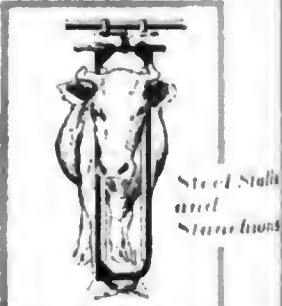
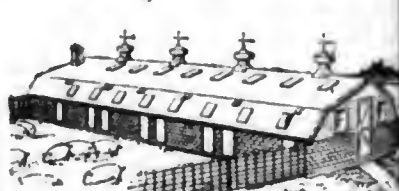
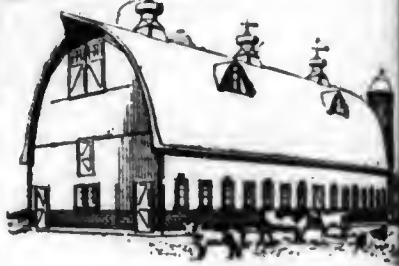
Jamesway advice is, "Don't build if you can remodel your old buildings." Many old buildings with the aid of our "know how" experience can be made convenient and entirely satisfactory at a fraction of the cost of a new building.

If you are keeping any farm animals, Cows, Horses, Hogs, or Poultry in improperly ventilated buildings, you are losing money every day you continue to do it. Pure fresh air is just as essential to animal life as food and water.

For more than a quarter of a century Jamesway Equipment for Barns and Poultry Houses has been the recognized leader. Jamesway's progressiveness in developing new and better types of farm buildings is also demonstrated in the New Pointed Arch Poultry House, Pointed Arch Farming Houses and Calf Barns.

Jamesway has helped thousands of farmers make more money from their farm stock. If you are interested in the questions of expense and income you'll find this book one of the most interesting you have ever read. It deals with the everyday problems of the farmer and gives good, sound, sensible advice of how best to solve these problems. Book also tells about Jamesway Equipment — the most complete and BEST line of equipment for dairy cows, poultry and hogs. Jamesway Stalls, Stanchions, Drinking Cans, Litter Carriers, Ventilating Systems, Poultry Feeders, Waterers, Brooders, Nests, Poultry House Heaters, etc., all shown in this book.

Mail coupon today to office nearest you — the book is FREE. Mark the things on coupon you are most interested in and you'll be agreeably surprised at the helpful suggestions you'll get. No cost — no obligation.



Litter Carriers
Feed Carriers
Feed Trucks

Steel Stalls
and Stanchions

Calf
Salt

PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

October 18, 1930



The Seed Bed Is the Foundation of a Profitable Crop

Philadelphia

Pittsburgh

Harrisburg

Mail Coupon to Office Nearest You

JAMES MFG. CO., Dept. 6902
Ft. Atkinson, Wis. Elmira, N. Y. Minneapolis, Minn.
JAMESWAY LTD., Weston, Ont., Canada

Send me your New Jamesway Book. I am interested in
☐ Building ☐ Remodeling ☐ Equipping ☐ Ventilating
☐ Cow Barn ☐ Horse Barn ☐ Silo ☐ Hog House
☐ Poultry House ☐ Building Tile
I would also like information on ☐ New Heating System for Poultry House ☐ New Pointed Arch Poultry House ☐ Dairy Barn Equipment ☐ Poultry Flock Equipment

Name.....

P. O.

R. F. D. State.....

Farm Facts and Fancies

By ALVA AGEE

Two profits are obtained from Park & Pollard feeds:

- (1) immediate production profits;
- (2) profits which come from better health and improved condition.

To be sure of profit-making feeds ask for Park & Pollard's.

Complete list of Park & Pollard Feeds

Poultry Feeds: Lay or Bust Dry Mash - Red Ribbon Scratch - Growing Feed - Intermediate Chick Feed - P & P Chick Scratch - P & P Chick Starter - Dairy Rations: Overall 21% - Milk-Maid 24% - Bet-R-Milk 20% - Herd Health 16% - Milkmaid Calf Meal - Other Feeds: P & P Stock Feed - Bison Stock Feed - Go-Tu-It Pig and Hog Ration - Pigeon Feed - P & P Horse Feed - Pochontas Table Corn Meal.

I WISH that every reader of the Pennsylvania Farmer could take himself out of the big company who will not surely know that they have dependable seed corn next spring. We shall not be carrying any surplus old corn into the next crop year and a nearly perfect stand of plants next June is going to look pretty good to the grower. That does not mean that the price a year hence promises to be good, but there is a basis for hope. And yet all that is aside from the fact that one needs a good stand every year, and we have some subscribers in localities who will not have good seed from this year's crop.

Right now is the time to attend to this matter. Corn grown nearby is to be preferred. Always there is danger in bringing in seed from a distance. Buy from some one who has the reputation of getting good yields, dry the corn thoroughly in a current of air, make sure it will grow and have that task safely behind you. Now, I have hesitated to write this because it sounds like pretty old stuff, and it is, but some of our readers are going to have trouble next spring if they do not heed this counsel that has been given by others during all the years of the past. The matter is important in many sections this year; it always is important everywhere, but next spring will be unusual.

A One-Family Survey

I have been reading a pamphlet giving some results of surveys of farm families. There is comparison of incomes and manner of life of various groups in the country and in town. We may need all these data. So far as encouragement to carry on and to do better is concerned it is my observation that the individual does better to compare any improved condition of his affairs with his former condition rather than with others. That is really more profitable because more heartening.

But social and economic surveys have been so much the thing in recent years that I wanted a part in it. In a highly unscientific way I have been making a bit of survey, the results being seemingly true for a representative family in a considerable group. The comparison is of present circumstances with those of a dozen years ago. Maybe that family should be concerned to know how far behind some town family it may be, but my interest has been in seeing some evidences of the headway it has made in getting satisfaction out of life. I have not felt free to go to the home to inquire how much the family ate and what the clothing cost, as a trained surveyor might have thought necessary, and confess that the observations made are too casual to fit into an official document. Of course they are offered with great diffidence.

Twelve Years Ago

The farm is not large, and a part of it is not very productive, but twelve years ago a light buggy was owned and used at times when there was a work-horse that was not over-tired. But there was not room for all, and nothing is very exhilarating in a drive behind a work-horse anyway, and with a lot to do at home it did not occur even to the mother that she should not stay at home. The oldest boy was at a restless age and felt that he should be at liberty to go with other boys to the neighboring village in the evening. Three younger children were on the way to the age when the home would seem slow at times, and the mother had the certainty lying ahead of her of some lonesome hours and continuing hard work.

What a Car Did

I did not know that an automobile, low-priced but dependable, could transform life so much until in even-

ings I saw it on the road. There was the boy, the three younger children, the father and, most important in my reckoning, the hard-worked and devoted mother. There was room for all, there was no extra expense for the one who was always putting others' interests ahead of her own, and the chance of being left on the home sidetrack through habit faded out. She was among those present when some going was to be done. The whole family was thrown together for its enjoyment after the day's work was over, friends were seen and life was a lot better.

Other Satisfaction

Even in the casual way that the survey was being conducted there was evidence that the "standard of living" was being raised. A telephone wire was run back to the house. When a mother and children are not held close to the home all the time, the clothing must be more like that of friends. One feels richer when riding in a car than he does at home, as I have mentioned before, and some labor-saving devices that others were buying became a matter of course.

It may be that there is a little too much pork, and not quite enough lamb, in the food rations to satisfy a scientific observer, and a little larger slice of the income should go into the midget golf, and it may be that the supper dishes are left some evenings, which was a most reprehensible thing under the old order. It is probable that the money spent for gas could have been used for fertilizer with financial profit. Granting all this and more, I think the mother is less concerned with comparison of her situation with that of some town folks than she is with comparison of her present lot with what was facing her.

I submit the results of this personally conducted survey to my older readers as something encouraging to agriculture and country life. I should not expect younger readers to understand.

Farm Legislation

Announcements are coming of bills to be offered in the Congress next December for the "relief" of the farmer. We shall have the whole situation discussed, but not to a finish. Again in the interest of clear thinking let us bear in mind that there is no way of taking unfair advantage of another nation and getting away with it. More than a dozen nations are counteracting the effects of some of our tariffs, and if we try to unload surpluses to the detriment of farmers of other countries these countries can protect themselves in various ways that will do us more harm than we can do them. We now have gained considerable ill-will, and are on the road to gain more, and ill-will means less business with them, and less business means harder times here. Times are hard enough right now, and we need better home markets and not poorer ones. Some things we can do, and are doing, that are in our interest without violating any sense of fairness, and any nation that goes beyond that turns out to be the loser.

Cooperative Conference

THE fifth annual conference of men and women interested in farmers' cooperative associations will be held at State College, Pa., November 20, 21 and 22. On the program will appear prominent leaders of cooperative activities in Pennsylvania and in nearby states. The program itself deals with membership problems and responsibilities, association finances and results of research work conducted during the past year on various phases of cooperative activity.

Engineering

By R. U. BLASINGAME

DUE to the dry season with consequent shortage of corn and silage, livestock feed is going to be at a premium this winter. It requires heat to raise the temperature of water to the body heat of the animal. The only source of heat production by the animal is through feed.

Possibly water tank heaters at the barn would be advantageous this season. One must remember, however, the fire hazard and take precaution not to have the heater too close to inflammable material.

Leaky Roofs

FROM time to time we have inquiries with respect to preparations for mending leaky roofs. Recently the school board at State College contracted with a firm to cover an old slate roof on the grade school building with what looks like a tar or asphalt preparation. This material is guaranteed for ten years. It is melted before being applied to the roof and the weather must not be too cold or too hot for best results. If the weather is too hot, such as was common this summer, the material will not harden properly and will tend to flow off the roof. On the other hand, extremely cold weather will prevent this roofing preparation flowing into all the cracks. However, there is ample time during the year when this roof patching material can be applied with satisfaction.

Sprayer for Whitewash

D. C. W., Clarion county, Pennsylvania, made inquiry about spraying buildings with whitewash.

Mr. H. H. Hostetter, Lebanon county, Pa., has a ten-row potato sprayer mounted on a truck, the spray pump of which is operated by a power take-off from the truck engine. Mr. Hostetter has used the spray outfit for spraying 90 acres of potatoes each week this season and whitewashing from three to five dairy barns. In addition he does considerable shade tree and orchard spraying. This is a good record and when the spraying season is over the tank and pump are removed, making the truck available for hauling.

The whitewash formula employed by Mr. Hostetter is 150 pounds of fresh slaked lime, 100 gallons of water and five pounds of melted starch.

Underground Pipes in Tile

A READER asks about the advisability of laying an underground pipe in drainage tile or in sawdust. As far as I can see, neither of these methods will give any particular value in either protecting the pipe against freezing or protecting it against rust. In fact, I would judge that the use of sawdust would cause the pipe to rust more rapidly.

I believe the only advantage one would get from laying the pipe in tile would be that it would permit one to disconnect the tile and pull it out in case of trouble.

However, if one will lay the pipe about six feet underground and in very cold weather will scatter straw or hay or corn fodder along on top of the ground over the pipe, I do not believe he will have any trouble from freezing. Straw manure is also good for this purpose. I. W. Dickerson.

Birds-eye Maple Markings

A READER asks whether the peculiar markings in birds-eye maple which give it that name are due to holes which birds have made in the trees and later grown over. As far as I can find out this is called birds-eye maple because some one fancied that the knot with the peculiar markings around it has somewhat the appearance of a bird's eye and not because the birds had anything to do with starting the injury. I. W. D.

Bob Lee says: "I make my own farm-relief by cutting down feed costs a third with a Letz Roughage Mill"

WHEREVER you see a feed-lot belly-deep in old stalks and trampled hay, you will find a farmer losing a quarter or even a half of his roughage and grain. He could save that wasted feed and turn it into milk and meat—with the help of a Letz Roughage Mill.

With threshing machine-like capacity the Letz Roughage Mill grinds fodder and hay into fine bits. Stock clean up their feed, instead of scattering it over the lot.

Another thing the Letz Roughage Mill does is to grind grain—10% to 30% of which is not digested when fed whole. It does this at the same time it grinds the roughage.

And, if you wish, the Letz will mix this roughage and grain thoroughly into a palatable and nutritious feed—a ration that will bring you the most in meat and milk—a balanced ration from the grain and roughage grown right on your own farm. The Letz and one man do all these jobs in one operation.

If you feed four or more dairy cows, twenty or more steers, or an equivalent number of hogs or sheep, you can cut feed costs with the Letz Roughage Mill. Letz Roughage Mills have brought farm-relief to a hundred thousand farmers. More than seven thousand of them

LETZ

AMERICA'S LEADING FEED MILL
LETZ MANUFACTURING COMPANY
1035 East Road, Crown Point, Indiana

There is a size and style of Letz Roughage Mill for every farm. May be had with exhaust fan and feed collector attached. Particularly well the dairyman find the Letz Mill a profitable machine, with production and profit dependent upon concentrated feeding.



ALL IN ONE MACHINE
Cuts, grinds, mixes—all at once or separately

Sharp knives for cutting and recutting roughage of all kinds

Beats for grinding all roughage and grain

It turns for mixing roughage and grain into a balanced ration

have recently written us and we have put their letters into an interesting book. A copy will be sent you—free—if you will fill out the coupon below—and mail at once.

What a hundred thousand farmers say the Letz Roughage Mill will do

1. Increase the feeding value of home-grown crops a fourth to a half by recutting, grinding and mixing them into palatable, well-balanced rations.
2. Make home-grown feed go farther and save the expense of buying high-priced, ready-mixed concentrates.
3. Enable a farmer to feed a fourth to a half more stock on the same number of acres.
4. Reduce the cost of production of milk and meat 25 to 50 per cent and keep livestock healthier.
5. Cut the cost of farm work through fewer operations and less labor at feeding time.

LETZ MANUFACTURING COMPANY
1035 East Road, Crown Point, Indiana
Without obligating me in any way, please send me the new book of facts by Letz Mill owners.
Dairy cows _____ Steers _____ Hogs _____
Sheep _____
Horse-power of my engine _____
My name is _____
My mailing address (for R.F.D.) is _____
City _____ State _____

Farm homes that are castles

You can tell the farm home which is a castle in the proper sense of the word. Not a mansion to be sure. But always imposing, impressive. Large, sunshiny rooms in the midst of broad acres and open fields. Expanse of ground, fresh country air. Neat trimmings and landscaping which add dignity to the house.

You know before you enter that the owner has a certain soundness of thinking usually called business sense. Always on guard against waste. And usually the housewife tells you that thrift—care and scrutiny at the time of buying—bought those extras which make the inside seem so complete. For, she adds, they read the advertisements.

Reading the advertisements tells you what to buy and how to get most value for every penny spent. A dozen needs arise on your farm every week. Knowing which machine which tools, which automobile, which suite of furniture, which cooking fuel is the best for the price you pay, will save money otherwise thrown away. Perhaps as little as twenty-five cents a week—perhaps a hundred dollars a single purchase.

You can beautify your home—make a real castle out of it—with money saved in buying advertised goods. When you buy merchandise advertised by name, you get purchase value in the greatest degree from every dollar spent.

It pays to read advertising



LONGER MILEAGE

Look at these extra bars on the new Weed American Tire Chains. No other tire chain offers this extra wearing and gripping surface. No other chain can offer these electrically welded reinforcing bars across the contact links. They were invented by Weed Tire Chain engineers. They are patented as another exclusive Weed feature.

Buy these longer mileage tire chains—the new Weed American. Sold by good Weed Chain dealers.

THE NEW WEED AMERICAN TIRE CHAINS Supreme

Listen to the Weed Tire Chain Radio Program every Friday evening commencing November 7. Tune in at 8:30 Eastern Standard Time, 7:30 Central Standard Time, over the Columbia Broadcasting System.

READ THE ADVERTISEMENTS TO KNOW WHAT IS BEST AND WHERE TO BUY



LEADCLAD ROOFS

"Doing Without"

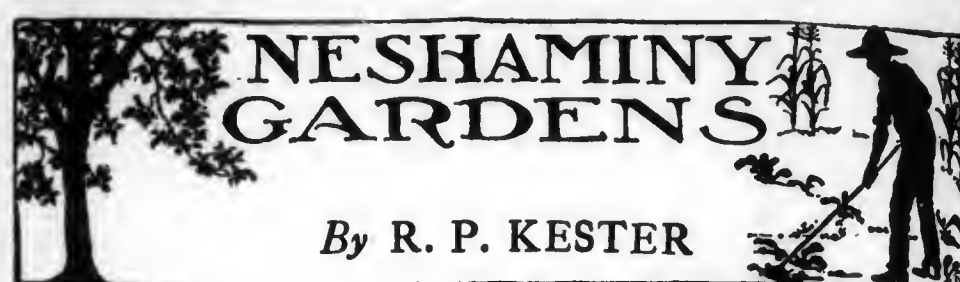
MAY COST YOU MORE THAN LEADCLAD

Putting up with a leaky roof or putting on ordinary cheap roofing is no saving. Painting and repair costs soon mount up. You actually save money by putting on Leadclad. It outlasts two or three ordinary roofs because it is protected by a heavy coating of PURE LEAD and LEADCLAD won't rust. Put on Leadclad and you have weatherproof, stormtight, lightning and fireproof protection.

Your dealer will show you samples and prices. Ask him

LEADCLAD

Manufactured Solely by
WHEELING METAL & MFG. CO.,
Wheeling, West Virginia



NESHAMINY GARDENS

By R. P. KESTER

WE have had this year the most gorgeous flower garden we have ever had, thanks to the work and persistency of an energetic wife. I take no credit for it, because I do not merit any. It was a discouraging prospect during the dry, hot weather of July, but after rain came the plants jumped ahead and have outdone themselves in producing an abundance of riotous colors. The result seems to me more than repay the flower loving gardener in the beauty and profusion of the blooms.

Among the most beautiful now, October 1, are the dahlias and cosmos. We bought one dozen dahlia bulbs last spring from a flower lover and have for the first time a real dahlia display, even though the plants were not trained as professional growers train them. For the finest and biggest dahlia blooms one should pinch off the side buds as they appear, leaving only the central flower.

A few people, and most of them are women, are born with a natural love of flowers. Many others admire them, but do not take the trouble to plant and care for them. Most farm homes would be improved at little cost by a proper planting. Many perennials are well adapted to home decoration and fit in well for those who do not care to work regularly through the summer in order to raise annuals.

But my encomiums on flower raising would not be complete and possibly not just if I did not mention our daughter's success with flowers at Neshaminy Gardens proper. Over a long season her garden has been blooming profusely, and I am glad to see in her the same love for the beautiful in Nature that is so refreshing in her mother, a trait that helps to soothe the nerves and rest the body for those who possess it.

Well, my reputation is really at stake at last! As long as one is asked for verbal advice or opinion only, one can so word the answer that it may be side-stepped if necessary. But when one is asked to perform a deed, the act is final and there is no evading the result. It may be remembered that I have written on two different occasions about successful "water witching" to locate a well. The last time was a few weeks ago, and although I tried to make light of it, and stated that I saw no reason why such a process should be taken seriously, I probably carried conviction in writing of my success.

I received a telephone invitation the other day to go to a man's farm and show him where to have a well drilled. I tried to tell him that I was half in fun in writing of it, but he said, "I am convinced that there is something in it, and I believe you can do it. So please come over and locate water for me." Then I, like the parrot, realized that I had talked too much; so I went. After I had finished performing the mysterious rite, and the "indications" were checked and double-checked, the man stuck a peg in and said he would tell the well driller to start right there. I shall sleep better when the man telephones me that water has been found.

Our orchards, both peach and apple, have been neglected this year. We have not had any continuous farm work done this season, for reasons given before, and it is difficult to keep the small and less important work done as it should be unless there is a regular program carried through.

But we promise ourselves that next year we shall do better. The plan now is to give the apple orchard another year of cultivation and then sow it down to alfalfa. Since half of the trees are Staymen I believe that highest color will be secured by the sod treatment.

When the cool weather begins I am always carried back to the time when arrangements were made in the fall for winter meetings for farmers. Call it fogysm if you like, but I am sure there was a more enthusiastic farm and rural spirit existing in the days when there were more local farm meetings held. Of course there is more scientific knowledge and more productive methods practiced now than formerly, but there is something else—something that is vitally necessary—that is lacking. This "something" must be restored to farm life before we shall have the old time peace and contentment that typified rural communities a generation ago. Frequent agricultural meetings in which all, old and young alike, took part, aided greatly in making such a spirit. Yes, I refer to the old-fashioned farmers' institutes and the Grange meetings, such as they used to be.

Friendly Talks

By
Edgar L.
Vincent

HOW much have we helped? "The world is not growing any better. Seems to me it is getting worse and worse every day. We never did read so many awful stories as are in the papers today. Murders, suicides, graft, theft and even in the best society everything seems rotten!"

Hold on a minute. When we say that, do we give a single thought to this question, "How much am I doing to make things better?" Now that gets right down to the heart of things. Everybody knows there are a good many things in society which are not as they should be. But it is very easy to let responsibility slip off our shoulders and say, "It is nothing to me."

When we are passing over our fields if we see a little apple tree that is sending out a branch where it ought not to be, or comes our jack-knife and away goes the straggling growth. Are we doing that in things that relate to our own lives? Are we cutting off the growths that do not help but do harm? Indifference to the world's best good is a thing that ought to go. Letting the boys and girls of our own homes grow up wild is another. It will not do to say, "I let my boys do as they want to. They have got to meet the world. They will come out all right."

Has the situation in your neighborhood no appeal to you and me? Then we are not good citizens. It is the right and privilege of us all to live right in our own homes, and our neighbors have a claim on us. Our responsibility does not end at the fence between our land and theirs. "But I don't believe in sticking my nose into other folks' business." That is all right. You do not have to do that to live on a high level to be honest and true and kind to everybody and to lead your boys and girls along the same road. The better land and the better citizen you are the more you are helping to make the world better, and how the world needs such living!

MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

President - - - Arthur Capper
Vice-President - - T. D. Harman
Vice-President - George M. Slocum
Editor-in-Chief - - E. S. Bayard
Manager - - - Neff Laing

PENNSYLVANIA FARMER

Published Weekly
Consolidated with
PENNSYLVANIA STOCKMAN and FARMER
Entered as Second-Class Matter of the Post Office at Pittsburgh, Pa., under the Act of March 3, 1879.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., October 18, 1930

No. 16

The Desert a Source of Wealth

By E. S. BAYARD

It is not easy for us to understand the importance of nitrate of soda in the affairs of Chile, particularly in the financial affairs. Our country's resources are so great, its industries so varied, its sources of national revenue so numerous, that we can hardly comprehend what this one product has meant to this little nation. Maybe we can get a better idea of it by remembering that it has been an international issue, determined by war, that it has contributed to the national treasury an average of about 40 per cent of its total income; and that it remains not only a leading industry but one on which the country's credits abroad must largely depend. For the volume of Chilean export trade fluctuates largely with the shipments of nitrates to other countries. Herein are some but not all of the reasons for the celebration of the centenary of nitrate, for the concern about the industry's future, and for the attention given to those who are interested in its use in agriculture. Herein too are the reasons for the issue of special stamps in commemoration of the centenary of nitrate, stamps of 15, 25 and 70 centavos, bearing the motto "Salitre significa prosperidad" and figures emblematic of abundance of food for the nations which use it.

The tax of \$12 per ton on the exportation of nitrate has been abolished, as stated in an earlier article; but under the arrangement whereby Chile holds 50 per cent of the stock in the new company with its modern and economical system of production the government will still secure large revenues from its nitrate deposits—now estimated at 2,500 million tons, but perhaps underestimated because not yet thoroughly explored.

All From a Desert

Let us remember that all this nitrate comes from a desert where grows no blade of grass, no shrub and no tree, a land apparently so barren that the uninformed might readily consider it absolutely worthless. Judging by its appearance the more of such land a nation has the worse for that nation; but if that land were not rainless there would be no nitrogen in it, and no copper either where that metal lies in a form soluble in water. The desert is a source of wealth to Chile, likewise to other lands which use its stored fertility to increase the production of food for man and beast.

The great day, el día del salitre, the official centenary day, came on Monday, July 21st. A gymnastic display by the school children of Santiago was the principal feature of the forenoon. We saw a host of school children, both of public and private schools, and they looked much like those of similar age in other countries. The uniform worn by the pupils of private schools reminded one of those of similar schools in Britain.

The afternoon began with a reception by the President of Chile, Don Carlos Ibanez del Campo. This was held at the Moreda, the President's palace. Then, at the College of Agriculture of the University, was held the ceremony of dedication, the unveiling of a bronze tablet commemorating the Centenary of Salitre or the centenary of nitrate. A few speeches were made, commendably brief, all in Spanish except the one made by

our Dr. Lipman. A hymn was sung by the school children and the students, a military band played well as such bands usually do, the President and his party departed and the rest of the distinguished company posed for a photograph before leaving for another reception. The tablet is an artistic work in bronze which I cannot reproduce, but it bears the following words:

1830—1930

Inaugurada el 21 de Julio de 1930 en conmemoracion del centenario de la primera exportacion de salitre, siendo Presidente de la Republica don Carlos Ibanez del Campo; Ministro de Fomento don Emiliano Bustos; y presidente de la Asociacion de Productores de Salitre, don Francisco M. Jefferrey.

That evening was held the official banquet given by President Ibanez at the Morada, his official residence. The table was a thing of beauty, with its flowers, glasses and plate. Our party was judiciously mixed with our Chilean friends, my seat being near the head of the table and directly opposite ex-President Figueroa. He and I conversed in a rather limited way, and thus my other neighbors, for we had not a large amount of a common language—English in one case and French in another. But we enjoyed what we could understand and laughed about what we couldn't. Senor Figueroa honored me by smoking a Pittsburgh stogie and pronouncing it very mild, and assuring me that he would never forget that occasion. Our boys declared that he couldn't forget the stogie, was glad he had lived through his smoke, etc., but I'm sure he was sincere, and I am too in saying that he is a fine man and worthy of the respect paid him wherever he goes.

The speeches at this dinner were brief, our sentiments being expressed in excellent English and with proper dignity by Dr. A. M. Soule—and he had some dignity left for future occasions. If I remember aright a cocktail, three varieties of wine and a cordial comprised the liquid portion of

this official feast, but there was no visible effect of the same on the behavior of any one. Everything was quiet but cheerful and a fine dinner amid exquisite flowers and beautiful table appointments should be a cheerful occasion.

There was one modest man at this banquet who received more attention, and deserved more, than any other except the President. This was Don Santiago Humberstone, now eighty-three years of age. He is of English birth and in his youth was an associate of Sir William Crookes. He came to South America about sixty years ago as a young chemist and is now known as the father of the nitrate industry. His important discoveries and developments have always been given freely to this industry and he holds a secure place in the esteem of the people even if his plants lose their identity in the big nitrate company or his method is supplanted by another. He wore, for the first time, at this banquet the decoration awarded him by the Chilean government in recognition of his services to the industry and the country.

President Jefferrey on another occasion, in reviewing the names of men who deserved recognition, said: "Especially I salute Don Santiago Humberstone, the ever youthful patriarch, the indefatigable vanquisher of the pampa, who has come to share with us the recollections of a life of great industry, to him mingled with the memories of his own lifetime, so full of hard work and interesting perseverance." We left Mr. Humberstone at Antofagasta, with many memories of what he had told us of the development of this industry and of South America in general.

The New System

The new deal in the nitrate industry means much to Chile in a financial way. It will probably mean much to several seaports in several ways. The old system of production was in many small plants and required thousands of men. The new system is in a few large plants and by the aid of machinery hundreds do the work which once required thousands. Instead of shipping from many ports as in a scattered industry only a few ports will be used, those near the great oficinas or plants. The cities at the unused ports are now shrinking instead of growing. At all of these ports men and women came aboard with their household goods, moving to some other place.

The industrial change which reduces the number of workers, concentrates production in a few large plants and centralizes shipping is going to make hard times for some towns and many that dwell therein, but in the end it will be good for the country as a whole and for other countries too. For ultimately all economies have good effects, even though they create current hardships. Mr. Humberstone and I were discussing the future of Iquique, formerly a great shipping port but now about to lose its nitrate business. He said that he had seen thirty ships in that bay at one time instead of the three we saw before us, and he foresaw dull times for that city; but he believed also that it would recover in time and find something to take the place of its lost business. I cite this merely as an instance of the optimism that (Continued on page 28.)



Deitrick Brothers, Monroe county, Pa., dairymen, erected a manure shed this summer with concrete blocks which is proving a great help to them in keeping the barn surroundings clean and neat as well as saving much of the manure's valuable quality. The shed is open at both ends so the spreader can be driven through when the contents are being hauled out. It also provides an excellent storage space for the spreader when it is not in use.

Thos. H. Wittkorn.

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
T. D. HARMAN, Vice-President
GEORGE M. SLOCUM, Vice-President
NEFF LAING, Manager

EDITORIAL STAFF
E. S. BAYARD, Editor-in-Chief
C. I. WHITE, Editor
M. C. GILPIN, Editor
MILES HORST, Field Editor
G. W. HARRIS, Field Editor

Editorial Offices: PITTSBURGH, HARRISBURG, PHILADELPHIA
Contributing Editors: R. P. Kester, Alva Agee, L. W. Lighty, W. D. Zinn,
R. U. Blasingame, J. I. Shibley, F. L. Bentley, J. G. Lipman,
S. W. Fletcher, H. C. Kramel, A. A. Bivland,
R. L. Scharring-Hansen, Gilbert S. Watts,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for livestock and classified advertising. No deceptive, immoral or scandalous advertisement inserted at any price.

Member Agricultural Publishers' Association,
Advisory Bureau of Circulations.

Volume 103, No. 16

Established 1877

ON OTHER FEEDS

LIBERAL marketing of pigs and light hogs was generally expected this fall in consequence of the shortage in the corn crop. Thus far this expectation has not been realized, although comparatively few heavy hogs are coming forward. Evidently the pigs are going to be fed to marketable weights on other feeds than corn. Oats, wheat, rye and barley will make a greater proportion of the country's pork this year than ever before.

SURPLUS DWINDLES

A NIGHT-MARE is a docile nag when daylight comes. Specters vanish with the dark. Scarcely a branch of farming has escaped the cold sweat induced by visions of a crushing surplus in late years, yet relief has always arrived before the calamity fell. The latest burden to remove itself is in the dairy business. Warehouse holdings on September first, reduced to butter equivalent, amounted to 29,000,000 pounds, which is considerable relief from the 50,000,000 pounds last January, although still enough to curb undue exuberance. The one redeeming feature of all the things which threaten to ruin agriculture is that they don't live up to their full promises.

FRIENDLESS

WILD garlic is one of several weeds to have the searchlight of science turned on their nefarious ways some time in the nebulous future. The life history and genetic weaknesses of these crop competitors will be laid bare if tentative plans, made by the U. S. Department of Agriculture at the instigation of the National Chamber of Commerce, are carried out. The Chamber by choosing weeds for its offensive used rare judgment in picking on something which has no friends. Most other "farm problems" have two or more sides and sundry angles, but public and private opinion agrees in condemning weeds. Many farmers will also agree that if anything can be done about garlic the time is ripe or over-ripe to know about it.

RURAL POLICE

THE farmers of South Dakota are asking for a state police force to protect their property from thieves who travel by automobile. Every state needs a rural police force nowadays, but in establishing it provision should be made to keep it in service in the country. Otherwise some executive may come along who will put to work elsewhere the force intended to protect the rural districts. Another suggestion might be made to our readers, most of whom now have the serv-

ice of rural or state police. Report promptly to headquarters any violation of law and get the policemen on the trail of the criminals. In other words make use of the state police. They are maintained and trained for service and are always ready to give it.

A CONTRAST

LET those who want to note the change in type of farm animals take a look at some old and some present-day catalogues or advertisements of the Poland-China hog. They will see in the illustrations of forty or more years ago a thick, deep, round, straight-backed hog which had legs but modestly concealed them. And they will see at the present time a high-backed, flatter and apparently slimmer hog, with legs so long as to suggest that it is too near heaven to be of the greatest value on earth. No doubt the illustrations exaggerate the hogs' characteristics in both cases, but they do indicate a great change in type. Furthermore that change is in the direction of greater usefulness, for the old-time ideal hog was of the type that is likely to produce twins.

TO STUDY LIVESTOCK PROBLEMS

THE formation of an Inter-American livestock advisory board to study livestock problems in the Western Hemisphere was recommended by the Inter-American Conference on Agriculture, Forestry and Animal Industry, which was held last month at Washington. Exchange of technical knowledge and prompt official report of animal disease outbreaks are cited as two ways in which such board might function to the advantage of the industry. It would probably soon find other means of usefulness, not the least of which would be the benefits derived from the better understanding which always results when neighbors get together and talk over their mutual problems. An exchange of viewpoints is one swap in which both parties profit.

THE BOND PLAN

THE voters of New Jersey are discussing a \$100,000,000 state bond issue on which they are to vote November 4th. This is for the purpose of effecting the following improvements: \$65,000,000 for highways, \$18,000,000 for the elimination of grade crossings, \$10,000,000 for buildings at public institutions, and \$7,000,000 for the purchase of watersheds to insure a supply of unpolluted water for the future. There is no question about the value of these improvements or the need for them. The only question is whether they should be effected and paid for in this way. There was a time when the farmers of the state would have opposed such a plan, but experience has shown the advantages of this kind of financing and they are now largely in favor of it. The state's credit is good. By bonds it can secure money at a low rate. With such money the improvements may be had promptly and then paid for gradually. By a few adjustments in taxation, including an increase of one cent per gallon in the gasoline tax, the bonds can be carried and amortized. The question then is whether the people wish to pay such a rental for these improvements and get them promptly, or whether they want to wait and pay for them out of current funds. The farmers of the state are going to vote for the bond issue because they do not want to wait for the roads they need now.

NOT A PROBLEM?

THE National Provisioner, able organ of the slaughtering industry, thinks that only the incidental hog producer, the in-and-outer, will be affected by the feed crop shortage; that there is a surplus of wheat, oats and barley which is sufficient for "a good hog crop" and all the fat cattle the trade will ab-

sorb"; and that "the feed problem is not a problem at all." We wish the feed problem could be correctly so classed, but the fact is that a deficiency in our greatest feed crop creates a problem regardless of supplies of other grains; and that deficiency will be felt later in the numbers, weights and condition of animals for slaughter. Nobody knows what the supplies of these animals will be, or the demand either, but it is certain that production of meats cannot be what it would have been with plenty of corn. In all probability this coming year's crop of fat stock will be short in numbers and weight, with substantial premiums for long-fed or finished animals.

SUGAR PRICE CONTROL

CUBANS propose to withdraw 1,500,000 tons of sugar from the market and distribute it over a period of five years. This price-boosting plan contemplates reimbursing owners of the withdrawn sugar through bank loans based on the sugar as security, reaching agreements with Java and other producing countries and restricting the amount of sugar exported to the United States in accordance with consumption. Judging from the outcome of similar endeavors in other countries Cuban growers must regard this proposition with more hope than confidence. England's experience with rubber, Brazil's with coffee and both our own and Canada's with wheat have all been costly contributions to the false doctrine of artificial price control. There is no apparent reason why sugar should be an exception nor indication that Cuba's plan, if carried out, would benefit any one so much as its competitors in sugar-producing sections of this country.

THEORY AND FACT

THERE are some theories which don't work out well in practice. Theories which are contrary to human nature never do. In legislating in the interest of labor the representatives of one country thought it would be a fine thing to provide that every employee discharged should be paid a month's wages. If that was good why not go farther and provide that every employee discharged should have a month's wages for every year he had served his employers? That was done, and the results are now becoming known. Employees of long service are working for discharge so that they can collect a large amount of cash at one time. They work as little as possible, they fail to obey instructions, they do everything possible to compel the employer to discharge them, and he tries to avoid the large payment necessary if he does discharge them. The result is that considerable labor is inefficient and unproductive, and it must be productive if the employer can continue to pay wages. Regular employment, year after year, is not likely to be the rule under such a law.

Before we comment on this law let us look at a theory our own lawmakers have enacted. They thought it would be a fine thing to have stabilization corporations to buy up the surplus wheat and cotton and hold same off the market. So the corporations are authorized and they buy large quantities of these commodities. But with big piles of wheat and cotton in sight others who would normally buy and hold are not doing so, and we have insufficient buying to absorb the selling of those who want to insure their future profit by hedging. And this will be the case as long as the big piles of commodities are held by an organization which acts from other than commercial motives, which doesn't know what it is going to do or when it is going to do it. No matter what the motives of those who legislate are human nature will prevent the success of any scheme which fails to put it into account.

Fifty Years of Service

New Jersey Agricultural Experiment Station Celebrates Anniversary

By G. W. HARRIS

LAST week the New Jersey Agricultural Experiment Station celebrated its 50th anniversary, marking 50 years of service to New Jersey farmers and many contributions in agricultural research to the world since its founding in 1880. Being one of the first experiment stations to be established in this country it has become a leader in soil research, and is recognized as such by other nations.

It was through the untiring efforts of Dr. George H. Cook, noted geologist from Rutgers College, that the Legislature provided state appropriation for the support of experimental work on the 98.4-acre college farm where Dr. Cook had been conducting tests with crops and fertilizers for 15 years. Eight years later federal aid was provided for the establishing of agricultural experiment stations in each state and the expansion of the New Jersey Experiment Station, but Dr. Cook did not live to see the enlargement of the work he had started. In 1889 he died. Dr. Edward B. Voorhees, his co-worker for many years, carried on the work of Dr. Cook and solved many new agricultural problems as director of the Experiment Station from 1889 to 1911.

In memory of these two men, respected and honored by their many friends, and in appreciation of their services to agriculture, a tablet was unveiled at the anniversary celebration on Wednesday. Besides the large group from New Jersey, delegates from all parts of the United States and many foreign countries were present when six internationally-known scientists received honorary doctor of science degrees from Rutgers University. The men so honored were Sir John Russell, director of the Rothamsted Experiment Station, Harpenden, England; Dr. L. O. Howard, principal entomologist of the U. S. Department of Agriculture; Dr. Lafayette B. Mendel of Yale University; Dr. C. F. Marbut, chief of the soil survey division of the U. S. Department of Agriculture; Dr. Theobald Smith of the Rockefeller Institute for Medical Research; and Sigurd Orla-Jensen of Denmark.

World-Wide Influence

Referring to the accomplishments of the New Jersey Agricultural Experiment Station, Dr. A. F. Woods of the Federal Department of Agriculture stated that the world, as well as the state and the nation, has felt the helpful influence of its work.

Sir John Russell in his address expressed the belief that we would now be on the verge of a world famine were it not for the intensive application of science to problems of food production since 1898.

"At present," he said, "it is impossible to foresee a time when the human population will lack adequate food supplies. The great difficulty now is in the other direction; agricultural production is so great that farmers everywhere are in distress. They have produced so much that the world is oversupplied, and they themselves are being starved in consequence."

"It is another aspect of the situation created in industry by the development of highly efficient machinery whereby one man now does the work of four or five, thus throwing them onto the labor market where some of them fail to be absorbed. The trouble is most acute in the more highly civilized countries. No doubt some solution will be found, but at present we must confess there is none in sight. This is the most serious problem of modern civilization. We agricultural workers regard it as political and want to hand it over to the politicians; the politicians regard it as scientific and they want to hand it over to us."

The Present Need

Sir John said that science has done so much to increase crop production that there is little demand at the moment for more of this work. The present need, he pointed out, seems rather to be the reduction of waste and losses, the securing of the same output at a less expenditure of labor and money, and the finding of some method of mitigating the risks of agriculture, particularly the dominating effect of weather.

There are many milestones marking the progress of the New Jersey Agricultural Experiment Station during the past 50 years, evidence of which

may be seen on New Jersey farms today. The first problem facing the new experiment station under the direction of Dr. Cook was a declining crop level throughout the old agricultural regions. Soil fertility at that time was being discussed at great length. Before his death he had established fertilizer experiments and tests which exposed frauds, analysis of livestock feeding stuffs to determine nutritive values, developed crop rotations for soil improvement and showed New Jersey farmers how to make use of soy beans and silage.

Gospel of Better Soils

In 1889, when Dr. Voorhees became director, eastern agriculture was still confronted with the problem of decreasing soil fertility and profitable crop production in competition with the fertile and newly opened West. In teaching the gospel of better soils he emphasized the use of chemical fertilizers, of green manures, of lime, of drainage and tillage. Soil cylinder experiments begun in 1898 by Dr. Voorhees were enlarged by a series of field plots in 1908 for testing the nitrogen availability

of new varieties, which is being conducted by Professor Blake and Dr. C. H. Connors, was started in 1914 when early varieties of peaches because of various faults were becoming unpopular. Concerning this work New Jersey Agriculture says, "The work was conducted on a scale never approached in peach breeding anywhere else in the world. As many as 30,000 blossoms were emasculated and pollinated by hand in some seasons. Whole trees were covered with cheesecloth tents to prevent cross-pollination by insects. Blossoming and ripening dates, hardiness, productivity, color of skin and flesh of fruit and its edible and keeping qualities were observed and recorded on hundreds of trees grown to fruiting age. So extensive and all inclusive did this work become that the Experiment Station now has the greatest collection of varieties and strains of peach trees growing anywhere in the world. Thousands of trees, representing new varieties developed by the Station, have been distributed to hundreds of New Jersey's fruit growers, more than 15,000 of one variety, Golden Jubilee, being distributed in 1927. The work was timely, for in addition to the increasing disfavor for some of the old varieties, extensive plantings in other parts of the country were threatening New Jersey peach growers terrific competition on the market."

One of the more recent developments at the Station, which has added New Jersey dairymen and which is being recognized as of importance throughout the country, is the development of the New Jersey Dry Mix calf ration. This substitute for milk in feeding calves was developed by Professor C. B. Bender, and satisfactory results announced in 1928. Tests by the Experiment Station and 800 New Jersey dairymen have shown that this ration saves between \$25 to \$50 in preference to milk in growing a calf during the first six months of its life.

New Jersey's Agricultural Experiment Station has made many contributions to agriculture and through its present research program is assisting the farmers of the state in making their industry a profitable one. To mention all the research work being conducted there at the present time would be difficult, and to tell of that which has been accomplished during the past 50 years would be impossible. The assistance has not been offered to the group of a few, but to all agriculture.

Delaware Poultry Show

THE Delaware State Poultry Show this winter will be held in the armory in Wilmington on January 8, 9 and 10, under the auspices of the Delaware Poultry Association in cooperation with the Delaware Farmers' and Breeders' Association, the State Board of Agriculture and the Agricultural Extension Service of the University of Delaware. Mr. H. S. Palmer, Newark, Delaware, is the secretary of the show.

Committees have been appointed to take care of the various departments of the exhibits of poultry and commercial displays and the cooperation of all the poultry raisers and hatcherymen throughout the state is being solicited in order that this show will be a marked success and a credit to the poultry industry of Delaware.

A special department is also being arranged for the members of the 4-H Clubs and the vocational agricultural departments of the high schools throughout the state. A poultry judging contest will be conducted for the 4-H Club members and the Association will send to the Madison Square Garden Poultry Show the three boys and girls making the highest score in this contest.

H. R. Baker

COCKEREL SALE

MORE than one hundred poultry raisers gathered at Dorton, Maryland, on September 30 for the pure-bred cockerel sale, which, according to those in charge, is the first event of its kind ever held in this section of the country. Eighty birds, representing three breeds, were consigned to the sale and all were disposed of, the average price received being about \$3.25 per bird. The highest price paid for a single bird was \$18, which was bid by Mrs. W. W. Hopkins for a Barred Rock cockerel bred by Edgar R. Hargett. Second best price of \$10 was paid by H. H. Rieck for a White Leghorn cockerel bred by Wm. V. Lauterbach.



Mother and Father Take a Vacation

ALL the men looked down at the floor sullenly. "I know what honor is even among thieves," said Flanders, "but here's a time when it doesn't stick. Smuggling, my men, is one thing, but shooting an officer of the United States government is another. You're not doing that for your own sakes. You're not big men enough," he said, not scornfully, but tolerantly. "It's past the honor point. I only want each man to suffer for what he's guilty of. Now out with it!"

He held up a new coin that he fished from his vest pocket.

"Now, Salter," he demanded, "how much of that were you carrying up-river, and where did you get it? You didn't make it yourself. You are not clever enough. I don't want to see your neck wrung—and you only a stool-pigeon! We found this in your pocket, and that much you have to own up to. Now who made it for you, and how much more did you dump overboard? Remember, my man, that a smuggler is one thing, but that the man who makes United States money is another, and there's trouble coming double for him. Don't be a fool and hide the men who have dragged you into this thing."

But Shain, who had entered the room, pitied the wretch who was thus in the sweat-box before his glowering companions, doomed to the same ordeal. He stepped forward and said:

"Mr. Flanders, I think I can give you some information. I've seen where that money is made, and I've seen the men making it."

"Out in that van there," and his voice broke in excitement as he turned and waved his hand at the cart in the yard. "I've got one of those men and a whole lot of the money, fresh from the pot. And I'm all ready to tell you the story when you are ready," went on the young man, and added, with a wistful smile, "if I don't go to sleep standing here, for I haven't closed my eyes for two nights, and"—his voice trembled pathetically—"I'm awfully tired, Mr. Flanders."

One of the deputy marshals knocked the stone from the slot where Shain had wedged it, and threw up the bar. The moment the bar was lifted, a blow from within nearly drove the van doors from their hinges.

Doody was squatting there on hands and knees, his shaggy hair bristling, his beard tangled. But despite his evident intent to appear ferocious, his attitude as he sat there, blinking at the light, his tousled appearance, his wordless rage, produced only the effect of the ludicrous. The bystanders began to laugh.

The laughter drowned out the old man's threats. He was clamoring to be left alone with Shain Seaway for just two minutes.

Two of the deputies seized him by his shoulders and dragged him out.

"Just two minutes!" Doody was screaming. "Only one minute, then! Just him and me! If you don't give me one minute with him, marshals, then you're no gentlemen, and you don't allow fair play!"

"Come along!" replied one of the officers, gruffly, and they pushed him toward the tavern. Doody stumbling along on legs that had long been cramped in the van.

"We'll leave you with him, I say," the deputy repeated. The old man attempted to turn and thank him, but the marshal kept him moving. "Oh, yes, he wants to see you, too."

THEY rushed him through the big room and the apartment where John Flanders had received him on that evening when his coming in was so unconventional and his going out so discourteously precipitate.

"Yes, you'll have all the time with him you're looking for!" cried the officer who was clutching his shoulder. "All the time you want with Fighting John Flanders."

The inspector had been conveyed to his own room, and was waiting for his guest, nursing his wounded leg on a chair. The officer pushed Doody forward and went out.

"Well, Doody," observed the inspector, running chilly gray eyes over his visitor, "after you get down to state prison you ask the chaplain to lend you a book on good manners. I'd advise you to study up particularly on the methods of entering and leaving a room."

"I've been lied to!" raged Doody. "They said I was going to have two minutes!"

Flanders shouted to the deputies, and they came in and took away the prisoner.

The other prisoners were still ranged on the "deacon's" seat, sullenly surveying their fetters. The officers took Doody along, seated him on an end of the bench and handed him to the nearest man.

"Lud," said the man, "what bring you to catch a critter onto us that we hadn't tried out and tested a more'n we can understand?"

"I didn't darst to let him loose!" mourned Doody.

"Like the feller that had the loose-reeve by the tail," observed a prisoner. "Both him and the loose-reeve would have liked to break clinches, but neither wanted to trust the other."

The Skokums of the Allegash

By Holman F. Day

Copyright, 1907, by Perry Mason Company, Boston, Mass.

"There's the sneak!" roared Doody, leaping up and dragging his mate up, too. A marshal drove them back upon the "deacons' seat."

Shain had been standing in the main room during the time Doody had been with Flanders. He had faced the prisoner without fear, and now came forward, his eyes flashing. Weariness and excitement had made his temper short.

"I have already told you what I think of you, Mr. Doody!" he cried. "You taught me how to play your game, and I played it. If you've got the little end, that's your fault."

"You can sneak onto men in the night and sack 'em like kittens for drowndin'," sneered the old man, "but you ain't got honor and spirit enough to meet a man in the open!"

"No man who has broken the laws of his country can claim that he should be allowed fair fight!" retorted Shain. "But I propose to show that I'm no coward."

He turned and walked away. The door of John Flanders' room was open, and the deputy called him in.

"Young man, I've been thinking," said the officer.

"So have I," Shain replied. "Mr. Flanders, you told me that a posse would be sent to surround those men that are in the woods. Isn't that going to be dangerous, and won't they be likely to get away?"

"Officers have to take chances on those things," said the inspector.

"Those men are looking for Doody to come back with the cart," Shain went on. "A notion has come to me. Couldn't you make Doody drive the cart back as he agreed to? The men will be hiding in the woods, but they will come out when they see him and the cart."

"He'd be drawn and quartered before he'd do it," said the officer.

"Then I'll dress in his clothes and drive the cart!" cried the young man. "Here is my plan, Mr. Flanders. If the officers go in there in the night under any kind of circumstances—even with the cart—it is likely that part of the men will get away. But if the cart comes in broad day, they will be unsuspecting. They'll come out and be taken wholly by surprise. Six deputies can find room in the cart. They can get in just before we come out into the clearing, and I'll drive 'em right to the door of the camp. I know I can do it, sir. Get Doody's clothes for me—there's no mistaking that checked belted jacket of his. I'll make whiskers out of the gray mane of that little high horse. I tell you, Mr. Flanders, we can be there at daylight tomorrow. Will you send me?"

"Come here, son," said the deputy, after a time. He had been pondering, with his brows knotted. Now he smiled encouragingly, and unfastened the golden badge hidden under his coat—an eagle with wings outspread, the official designation of the customs service. He seized the young man by the coat, drew him close to his chair, and pinned the badge under his lapel.

"That's the bit of brass that John Flanders has worn on this border for a good many years," the deputy said, with pride. "I want it to go along on just such a trip as you've mentioned, young man, seeing that the old fellow can't go himself. No one else ever wore it. Pin it on under old Lud's checked jacket, and if your nerve gets a little shaky when you creak your horses into the clearing, just remember that Fighting John expects to get his badge back without any smooches or streaks on it."

Shain went out of the room with the red in his cheeks and a warm mist in his eyes.

An hour later the van was climbing back over the hill. A pair of big horses drew it, and the little Normans trudged behind without a burden. They were reserved to haul the van into the clearing.

Two buckboards followed the van, and these were loaded with deputy marshals. An officer drove the van, and in the sun, on the top, slept Shain Seaway, arrayed in the habiliments of Lud Doody. That wearing apparel had been surrendered only after a series of tremendous tussels and liberal interchange of invective. To the young man, sick with sleeplessness, every nerve, muscle and fiber longing for rest, the jollings of the cart were simply dandlings that lulled him more soundly asleep.

The sixth man set his rifle inside the van and turned his gaze into the blue sky of the serene morning. Then he peered into the depths of the van, where five deputy marshals were huddled, each man nursing his gun.

"It seems considerably like the poem, 'We were crowded in the cabin,'" suggested the last man, as he lifted his knee to the wagon-tail and began to crawl in. "There's only one consolation; we sha'n't have to pull the doors shut until we get to the clearing."

He took his place with the others, and the van went creaking on, the little Normans struggling with its weight valiantly.

The buckboards had been left at the place where the turnpike joined the wood road. From there on, the marshals had trudged at the rear of the van, until Shain had warned them from the driver's seat that they were approaching the clearing.

The young man drove with his elbows on his knees, his hat pulled well down, his whole men expressing such weariness as Doody would be expected to display after his trip. Further than that, the attitude enabled him the better to maintain his disguise, which was a rather sorry effect of gray hair and whiskers, to the making of which had gone most of the mane of the high horse. He realized that its paltry defense would barely shield him until he could get the cart across the clearing. It was not possible for a vehicle to approach the cabin without signaling its advance a long way off. Little stones filled the wheel-track gullies, and the tires crashed among these constantly.

WHEN the van emerged from the edge of the woods and started across, Shain knew that the eyes of the counterfeiter were upon him. He did not know where to look for them, but he realized that they would not be caught napping in the camp. And they were not. The cart was allowed to come to a halt fairly in the yard of the camp before there was sound or sign of life. Then a man stepped out of the woods and flourished his arm over his head.

"Are you alone, Doody?" he called.

Shain gave an answering flourish, and without replying in words, clambered down over the wheel and stooping with Doody's familiar gait, went into the camp. He desired to avoid the chance of being halted again and of having questions put to him as the men came across the clearing. It was an artful maneuver, and the gang came thronging out of the timber, and followed the spokesman to the camp.

They filed under the horses' noses, and each man, with a sigh of comfort, set his rifle at the corner of the camp. They exhibited a cheerful sense of relief that their vigil and their waiting were over. Shain had seen from the dingy window that there were seven of the men—the expected addition to the band had arrived during his absence.

It was the red-bearded man who was now leading them toward the door, and he began to talk in a loud tone, addressing the supposed Lud Doody whom he had seen pass into the camp.

"You want to hurry your grub as fast as you can, Lud," he declared, bluffly. "The stuff is all packed and ready, and the boys are mighty uneasy."

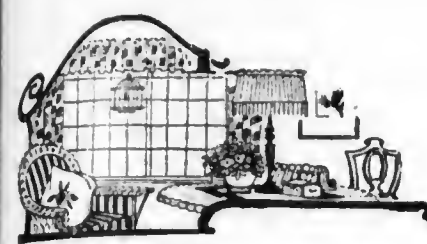
At the instant that the red-bearded man had his foot on the door-step Shain was crawling into the sunshine on the other side of the dim camp, issuing through a window.

"There's some swaggon, but you'll have to catch it cold," continued the speaker, "and some hard tack."

The young man had now circled the camp through the raspberry bushes, and had come to the corner where the men had so guilelessly stacked their weapons. He gathered them into his arms as he would have gathered fagots, and dropped back into the bushes at the moment that the first deputy dropped out of the cart with a snort of satisfaction at sight of the guns thus taking legs.

"You won't have a big load, for each of us can pack seventy-five pounds on his back. Did you meet any?" The red-bearded man paused suddenly, and peered round the dusky interior. "Where are you, Doody?" he shouted.

"Out here!" called a strange voice just as the last man in the single file stepped into the camp. Instantly several of the counterfeiter's crowd back to the door. (Continued on page 12)



Baskets Again

By VIDA M. BATES

WHEN the articles on basketry appeared in the Pennsylvania Farmer last winter, I did not succeed in getting hold of material and starting in. But now I have a supply of raffia and rattan, and a book of instructions too; most of my spare time now is spent making baskets of great beauty. I haven't been "stuck" yet, though some of my efforts might not have passed a critical teacher.

The biggest job I have had was making a broad shallow basket of rattan with raffia woven in the bottom and as a row about the side. My rules called for green rush—probably I might have avoided tedious work if I had followed those instructions. Still I finished it after awhile.

My other raffia weaving was a little basket in hazy squaw stitch worked over a number two rattan. I wish there were some way to speed up because I like the looks of the basket and find the raffia easier on my hands than weaving with rattan.

One day I applied clear varnish to one little basket and oak stain to some others. This is quickly done with a fine brush and dries in a short time. My book tells at great length about dyeing with ochre and this-and-that, but I heard about "soap dyes" and decided to try them. They are so simple to use and give such good color that I enjoy "boiling up" a hank of raffia or a few coils of rattan, watching to get just the shade or tint that I want. My first attempts were not so highly satisfactory as I did not know then that the rattan and raffia need to be washed in soapy water and rinsed before placing in the dyepot.

It is such fun to create baskets out of mere raffia and rattan that I hope you do put in some new designs in baskets that I can make.

Note:—We will gladly send any reader our library volume on "Basketry" if she sends with her request twelve cents to cover postal charges. We loan you this book for two weeks and it's brim full of helpful models and ideas. Do let us hear from our basket enthusiasts—for if many of you care to do some interesting basketry before Christmas, we want to help you. This page is for you. Let us know what you want.

Gertrude S. Stewart.

Home-made Cards

WHEN we want something different in Christmas cards, why not make them? The work is easy if we are careful not to attempt more than we can carry out in the time at our disposal.

If there is a baby in the family, get a snapshot of him at his best taken at a distance that gives you a face as large as a dime or possibly a five-cent piece, and have finished as many pictures as you need cards. If you wish to economize, get blue-print paper which is easy to manage and very cheap and try making your own prints.

Buy plain white cards small enough to go in an ordinary envelope and in the upper left-hand corner cut an opening either circular, heart shaped or triangular. This is easily done by covering with a pattern, tracing with pencil and then cutting with a sharp pointed knife. Cut your print so that it covers this opening in the card and paste it neatly on the back of your card, so that the face looks through the opening. Below it write a Christmas sentiment and your name.

A mounted picture of the old apple orchard, a corner of your garden or any favorite farm scene makes a charming Christmas card. Mount the pictures on plain white cards and write your greeting and name on the back.

If the front door of your home is charming (and many farm homes have wonderful porches and doors) make a snapshot of it, from this film, print blueprints or regulation pictures and mount them on a thin blue cardboard or heavy paper. Write

your Christmas greeting and name on the back in red ink.

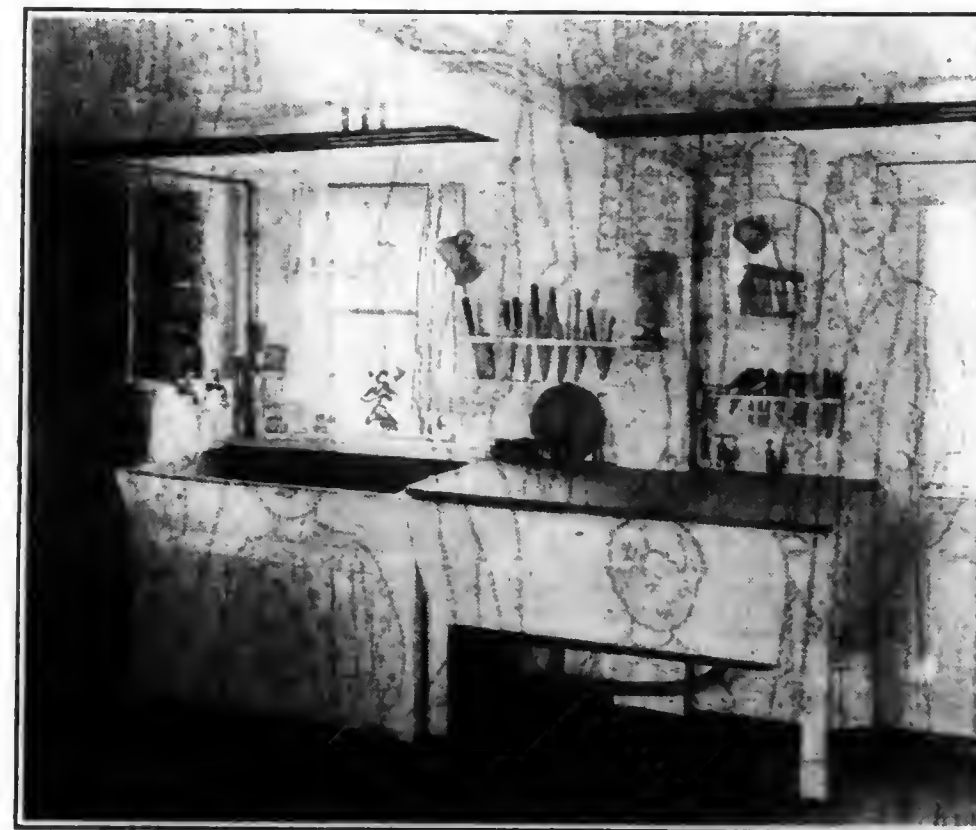
Perhaps you can still find tiny red woodbine leaves. Press them, touch each lightly with beeswax or paraffin and press with a warm (not hot) iron. Fasten to the corner of your card and you have a decoration much prettier than any the printer could supply.

L. M. Thornton.

Oyster Stew and Cool Days

BECAUSE October has an "R" in its spelling—and also happens to be a suitable season for eating oysters, we welcome this flavorful shellfish with especial eagerness after being deprived of it for several months. In the early fall, too, there are often cool periods that suggest something temptingly hot for the evening meal. Nothing could be more satisfactory for the purpose than a good oyster stew. The Bureau of Home Economics tells how to make it.

One quart milk, one quart oysters, four tablespoons melted butter, two tablespoons flour, salt, pepper, chopped parsley.



Many farm homes must have laundry work done in the kitchen. This picture, taken by the Bureau of Home Economics, U. S. Department of Agriculture, shows an arrangement that offers suggestions to country women. Have the built-in tubs near the sink and provide them with a cover. This cover may be lifted off on wash-day. On other days, it provides a convenient and roomy work-table.

A linoleum cover for the fitted wooden top is cheery and sanitary. It might be better to have the faucets placed just inside the tubs instead of above them. When not in use they would then be entirely out of the way of work space and shelf room.

Heat the milk in a double boiler. Strain the oysters from their liquor and pick out any small pieces of shell that may be clinging to them. Heat the oyster liquor slightly and remove the scum which rises to the top. Blend the flour and butter and stir into the milk until thickened. Add the oysters and the liquor and cook for five or ten minutes or until the edges of the oysters begin to curl. Season to taste with salt and pepper. Serve in hot soup plates with fine chopped parsley sprinkled over the top.

Timely Tips

LEMON juice on apples and pears prevents their turning brown when used in fruit salad, or fruit cocktail. Pears, seedless grapes and sweet plums, a little lemon juice, powdered sugar, makes a tasty fruit cocktail. Top it with a maraschino cherry or a sprig of mint.

An opened table drawer with a small board over it often makes a convenient typewriter table the proper height. The height should be about 26 inches from the floor.

Do the ruffled curtains collect dirt when the bedroom windows are open? A small tack placed high on the edge of the wooden window frame where it will not be seen, serves to hold the little loops which tie back the curtains. Saves the bother and damage of pins.

M. C. B.

October Nuts

By FLORIS CULVER THOMPSON

TAWNY nuts from the forests were the finish of our forefathers' Thanksgiving dinner and are traditionally a part of our holiday feasting, too. Today the nuts we enjoy may be shipped from any part of the world, from Sicily or Chile. Or we may relish most our excellent native nuts, butternuts, black walnuts, hickory nuts, sweet chestnuts and pecans.

We thought it capital fun as children, to gather the green-clad hazelnuts from their low bushes after the first frost and to shake down and pick up a sea of butternuts. But whether we gather or whether we buy nuts, we must bear in mind that they are a concentrated food, rich in fat and protein. This makes them all the more valuable in the diet as long as we regard them, not as an accessory, but as a body-building food. To be sure, we expect to serve nuts and raisins as a fitting climax to the holiday dinners, but it is wise to serve them often as an important part of the meal.

Nut loaf is a very substantial dish. Mix one pint of rice or cold baked beans, two eggs, one and one-half cups milk, one pint cracker crumbs, one pint chopped nuts (walnuts, pecans or peanuts) one diced onion, two teaspoons salt and a little pepper. Bake in two loaf pans in hot water in a moderate oven two hours.

New Salads

Hickorynut balls are a delicious accompaniment to salad. Mix cottage cheese with onion juice and enough sour cream or salad dressing to moisten. Form into neat little balls. Grind hickory nuts and roll the cheese balls in the nut meats until well coated. Serve with salad or as a garnish to cold meat platter.

Peanut and banana salad is simple and very popular. Peel and cut small bananas in half and lay on lettuce leaf to resemble butterfiles. Squeeze lemon juice over them to keep them from discoloring. Grind the roasted peanuts rather coarse or chop in a bowl. Put a spoonful of mayonnaise between each two banana pieces, to form the body of the butterfly. Sprinkle plentifully with peanuts.

Peanut butter may be whipped into salad dressing and used on pineapple or other fruit salad. Try stuffing cooked prunes with peanut butter also.

Butternuts have such a distinctive taste that they dress up a plain cake if added to the frosting.

Chestnuts are a flavorful addition to stuffing for fowl.

Hickorynut or black walnut cake is delicious and keeps moist longer than most cakes. To make it, cream one-half cup shortening with one cup sugar. Add three-fourths cup water alternately with two cups flour, sifted with two teaspoons baking powder. Add one-half cup nut meats and one teaspoon salt. Beat four egg whites until stiff and fold them into the batter. Bake in an angel cake tin in a moderate oven for about an hour.

Winter Gardens

PROCURE a clear glass fish-bowl of any desired size. The large flat-bottomed ones are ideal. Take a trip to the woods and select small leafed ferns, checkerberry (with red berries if possible) hepatica, mosses, pipisaway or any woody plants. Sprinkle a very thin layer of coal ashes, or turn a piece of moss upside down, on the bottom of the bowl, moisten with water and arrange the plants to suit the fancy. Cover the top with a piece of glass and set in a sunny window. It will be a source of pleasure to watch it grow when the ground is covered with snow and blustery winds blow. A friend has one in which a hepatica is in bloom at this time. Some women are reaping a harvest by making and selling such bowls at good prices in the cities.

A. M. S.



Speed up and HOLD IT!

Step on it! It's action you want now—action that will bring those pullets into steady egg production in time to capture the high price egg market. Speed 'em up and hold them to continued high production—that's the pace that makes profits jump.

Larroe Egg Mash and Scratch Grains gets 'em laying in short order—without forcing them, too. Larroe means business—it's always uniform—day after day, it's always the same. That's why it steps your birds up to a steady, continuous laying rate and holds them there.

Start your pullets on Larroe Egg Mash and Scratch grains now. This means High Gear production and greater year round profits. See your Larroe Dealer at once for your requirements.

Larroe Is Complete

Larroe is a complete egg mash—there are no extras to buy such as greens, semi-solid butter-milk, minerals, etc. It contains everything necessary in just the right proportion to make you the greatest profit over feed cost.

THE LARROE MILLING CO., DETROIT, MICH.

Larroe
FEEDS THAT DO NOT VARY
FOR POULTRY, HOGS & DAIRY

Larroe Family Flour—for Bread, Biscuits,
Cakes and Pies



GIBBS TRAPS ARE BEST

They HOLD what they CATCH—and add to your Pelt Profit. They Pay You to Use Them—You Pay to Use Others. Send for our NEW Catalog—FREE—BEFORE buying. This "Gibbs" Trapping Equipment includes TWO TRU-GRIP Traps, two "Wire" traps, one "A" 10 to 15" No. 1 "Single Grip" Trap, 15¢ ea.; \$1.65 Doz. Postpaid. If sent dealer does not have them, order direct. W. A. GIBBS & SON, Dept. G-13, CHESTER, PA.

Navy Brand Concentrated Buttermilk
From Tuberculin Tested Cows

29 per cent milk solids, 6 per cent lactic acid, thick as cream with no foreign ingredients. Reduces feed-pulling and lessens danger from conditions increasing egg production and promotes fertility and hatchability. Good for chicks, broilers and laying hens. Sold direct from the factory in barrels of about 450 lbs. Half barrels, about 200 lbs. Write for price.

TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, PA.

FREE RADIO CATALOG

LOWEST WHOLESALE PRICES

108 pages of radio bargains. New 1931 Screen Grid, all-electric, A. C. Sets in beautiful Consoles—also battery operated sets. Write today, ALLIED RADIO CORPORATION, 713 W. LAKE ST., DEPT. 713, CHICAGO.

FARQUHAR SAW-MILLS

Built with Roller Bearings and Positive Geared Set Works.

Fast, Accurate Cutting—For Steam, Tractor or Gas Motor

A. B. FARQUHAR CO., Limited, Box 646, YORK, PA.

The Skokums of the Allegash

(Continued from page 8.)

"Marshals!" screamed the men within.

They rushed toward the back window. Two men stood there, the muzzles of their rifles gleaming over the tops of the raspberry bushes.

"The idea is, gentlemen," said one of the marshals, coolly, entering the camp, "we've got you surrounded. Pass out one by one and be handcuffed."

The calamity was so astonishing, so little anticipated, so wholly heart-breaking, that after one hoarse cry of anger, the prisoners slowly marched past the deputy at the door into the hands that clutched them as they left the steps.

A half-hour afterward, as they were started on foot for the return trip, the evidence of their counterfeiting work in the van, the red-bearded man uttered the unspoken query of his mates, who had been peering about curiously ever since their arrest.

"If it ain't too much to ask you, officer, where did Lud Doody slip to after baitin' us out of the woods?"

Shain had thrown off his beard and the woodsman's checked jacket, that he had worn over his own coat. He was driving the van, and the prisoners had paid no further attention to him after one glance.

"No such man with this party!" said the deputy.

"Why, I saw him with my own two eyes get off that cart and walk into the camp!"

"No, you didn't!" retorted the marshal.

"The United States gov'munt ain't hirin' ghosts nowadays, is it?" demanded the counterfeiter, with some asperity.

"The government is getting hold of spirits from moonshine distilleries right along," replied the deputy, jocosely. "and this might have been one of them. I really do think that was a spirit."

"You do, hey?" the tone of the prisoner was sarcastic.

"Yes, I think it was the spirit of Fighting John Flanders done up in a brand-new package."

The flush that went over Shain Searway's face indicated that he appreciated the fullness of praise like that.

There was the same flush on his face a few days later, when Fighting John himself told him that he was entitled to the reward that the government had offered two years before for the detection of one of the most persistent bands of counterfeiters that had dared to put out spurious coin.

"And last of all," concluded Flanders, his whisker-tuft perked decisively, "I know grit and brains and the making of an officer at sight, and I've never been fooled yet. You're the best material I've ever struck, son. I need a chap to be the right hand of John Flanders on this border, for John Flanders is getting old. What do you say to wearing that badge you've got on there? It means you're Uncle Sam's man, and there ain't a prouder title on the face of the earth."

The enthusiastic devotion of the deputy shone in his eyes. His private conviction that the man who had served Uncle Sam fearlessly and honestly need not doff before an emperor was reflected in the light of his countenance.

Shain, his fingers trembling, took off the badge and laid it on the deputy's knee.

"I—I—think," he faltered, "that I'll keep on my way down-river and hunt up the Sirols family. I came up this way to visit them, and to see where my folks used to live, and I guess when you have thought all this over, Mr. Flanders, you'll see that it's been mostly accident that I was able to help you."

"Go down and visit your Sirols family," said the inspector, "but you come

back, and you come with your arm crooked at the elbow and the hand up straight, palm outward, and your tongue ready to swear that you'll be a good and faithful servant of the United States government, and be ready to take the appointment I'll have here ready for you then, or I'll never let you back across the border. I'll seize and condemn you."

Therefore Shain Searway went on down-river to the country of New Acadia, bearing some interesting news for the rest of the family.

(The end.)

The Black Forest Trail

TOURISTS in northern Pennsylvania are becoming increasingly aware of the beauty of the scenery along the Jersey Shore turnpike, or, as it is often called, the "Coudersport pike."

The clean dimness of the woods, the view from the fire tower at Cherry Springs where nearly 200,000 acres of almost unbroken forest meets the eye, frequent glimpses of wild life at home—deer grazing where shadows deep and sunlight shene dapple their sleek backs, tiny fawns slaking thirst at cool tarns, occasionally a great lumbering bear trotting across the trail—the wildness of a gorge where a plume of white steam drifts from a railroad train passing under the bridge over which the traveler drives.

In grand old hardwood forests here the wild pigeon is believed to have nested for the last time, and under the sheltering boughs the last wolves in Pennsylvania ran in silent packs.

Pine Creek, Kettle Creek, Sinnemahoning—what wonder-tales are told of lumbering, hunting and fishing in this region!

Here a wise commonwealth has preserved for future generations a tract of land made famous by Ole Bull's unhappy attempt at colonization. To this forest he brought his company of Swedish wood-carvers and violin-makers. Here are the foundations of the castle he built in a wild, beautiful spot on the mountainside. Many of the stones in its walls have been built into a stone house down in the valley.

A spring of cold, clear water below the castle site still bears the name he gave it—Lysol. A rustic bridge across the stream, tables and a fire-place for the use of tourists add to the comfort of visitors.

After you have plinked here you will wish to steal softly up the narrow pathway to the prominence where the castle stood, and, under the wedded flags of two countries that he loved, pay tribute to one in whose soul God placed the divine fire of music.

Potter county, Pa.

Why They Fail

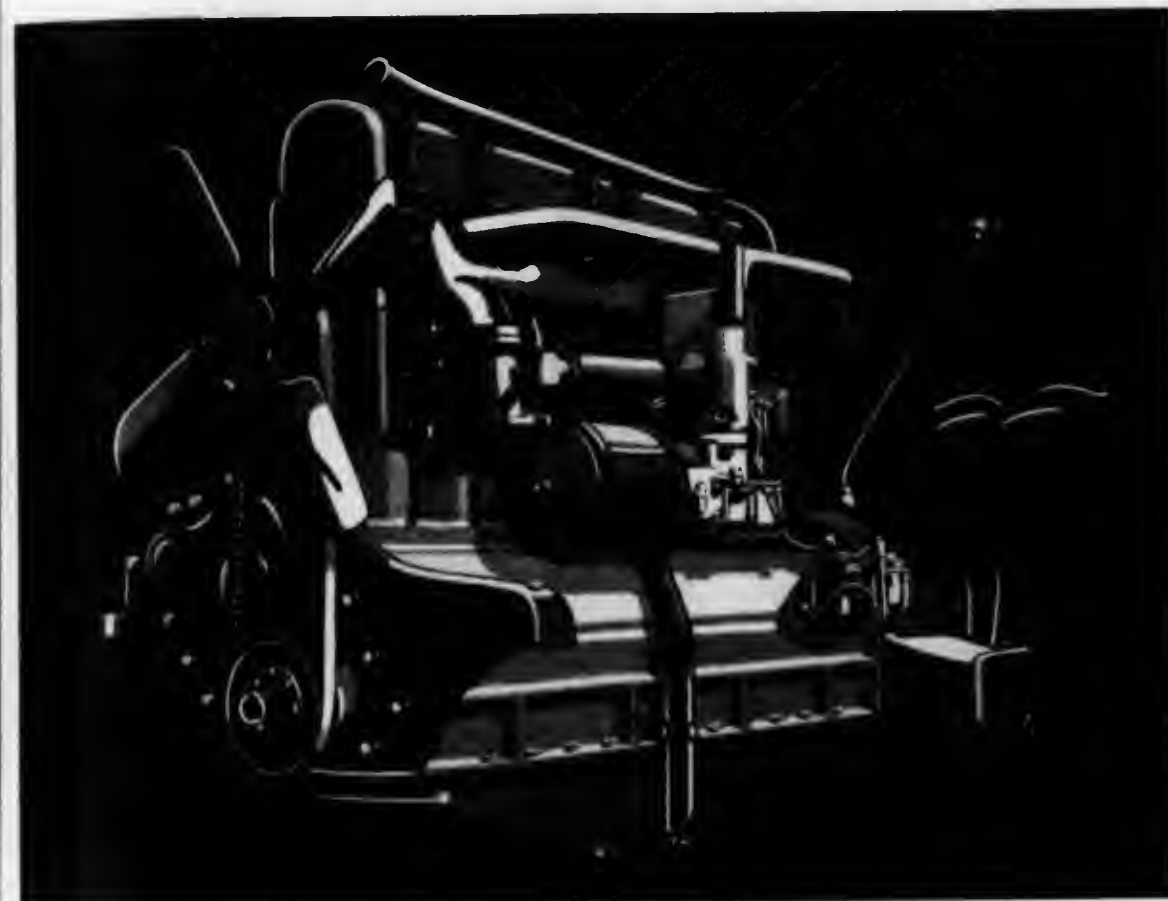
I NOTE your editorial in the September 20th issue entitled "Why They Fail," which is applied to farmers. In looking over the past I can think of but few farmers who stuck strictly to their farms who have made an entire failure.

Not many have succeeded in laying up much money, but they have had a home and enough to eat and wear to keep them comfortable. The few I know who have made a failure so that they have had to sell the farm have contracted the debts in hope of gain where there was a risk that goes with all speculative transactions. They risked and lost.

A few farmers of my knowing have made money and some by careful saving from year to year have laid up a surplus sufficient to take care of them in their old days without disposing of the farm. Most farmers of my knowing do not seem to be in danger of bankruptcy. A. J. Legg, Nicholas county, W. Va.

ANNOUNCING

THE WORLD'S LOWEST PRICED VALVE-IN-HEAD STRAIGHT EIGHT...



FROM

\$1025

F. O. B. FACTORY

The **8** as **BUICK**
BUILDS IT

Here, unquestionably, is the most wonderful and welcome news Buick has ever had for the scores of thousands of Buick admirers in agricultural communities.

One of the four new series of Buick Valve-in-Head Straight Eights, now winning a record reception in all parts of the country, is priced as low as \$1025 at factory—fully \$200 less than any Buick six of recent years.

A Buick Eight at less cost than last year's six! A Buick Eight, with even more power, even more swiftness, even more stamina, even more endurance than enthusiastic owners have

always associated with Buick... at a price so low that it actually becomes expensive to buy lower priced cars!

And a big, roomy, luxurious Buick Eight as well, with plenty of

space, plenty of head and leg room, for passengers who are accustomed to space and demand it in their automobiles!

It is powered, like Buick's remaining three series, by a masterly new Valve-in-Head Straight Eight engine providing performance far surpassing that of any previous Buick. It introduces new Insulated Bodies by Fisher, upholstered in either broadcloth or mohair, and skillfully insulated like a fine home against heat, cold and noise. It provides new Engine-Oil Temperature Regulator—new Air Intake Silencer—new Ring-Type Torsional

Balancer and other features promoting maximum engine efficiency, smoothness and stamina.

Here, indeed, is the ideal car for discriminating farm motorists. Here is a car that combines the

greater luxury and performance of The Eight as Buick Builds It with exceptional economy and long life. Here is value that only Buick with its tremendous two-to-one leadership in fine car sales could possibly achieve.

Visit your Buick dealer—today! Note the size and strength of this car—the thoroughness with which every unit of body and chassis has been constructed to assure extra long life. Then drive it—test its thrilling performance—realize what an extraordinary value it is and how easily it can be yours on the special G. M. A. C. plan for farmers.

Buick Motor Company, Flint, Michigan
Division of General Motors Corporation
Canadian Factories, McLaughlin-Buick, Oshawa, Ont.

FOUR SERIES			
1025	STRAIGHT	1535	
1095		1565	
1285		1610	
1335		2035	
ALL VALVE-IN-HEAD			

WHEN BETTER AUTOMOBILES ARE BUILT... BUICK WILL BUILD THEM

When writing advertisers please mention Pennsylvania Farmer

Whether you have electricity—or not... RCA RADIOLA gives you the *Finest in Radio*



With electricity—the new RCA Radiola Super-Heterodyne Model 80—at a new low price! Screen-grid—9 tuned circuits—magnified, illuminated tuning dial accurately calibrated in kilocycles—volume control—local distance switch—push-pull power amplifier—improved electro-dynamic speaker—handsome walnut cabinet—\$142.50 less Radiotrons. Also ask to see and hear deluxe model and Radiola with electric phonograph.



Without electricity—the RCA Radiola Model 22—operated by batteries—at a price all can afford! Screen-grid receiver for battery operation. With enclosed RCA loudspeaker. A wonderful value for the money. An excellent set for receiving your favorite station with amazing clearness and lifelike reproduction of tone.

THOUSANDS of farmers have declared that the radio news bulletins on crops and prices and weather are so valuable that they couldn't possibly afford to be without an RCA Radiola.

But even this important service to farmers is only a small part of the benefit and enjoyment that the whole family will get from either of these highly perfected radio instruments

Special programs for mother... entertainment for children... educational hours for boys and girls... and then programs which cost millions of dollars to put on the air

... the highest priced orchestras and singers!

RCA Radiolas are designed by the same great staff of engineers which has built so many of the broadcasting stations of America. And they are built by the largest manufacturer of radio apparatus in the country.

Let your Radiola dealer demonstrate for you the rich, full tone of these instruments. Let him show you how they tune in programs from stations near and far. And ask him to tell you how easy it is to own one.

Radiola Division, RCA Victor Company, Inc.



There's a heap of troubles pecking at feet!

We remember the time when we were just about so tall, out scattering a bucket of corn to the chickens—bare-footed!

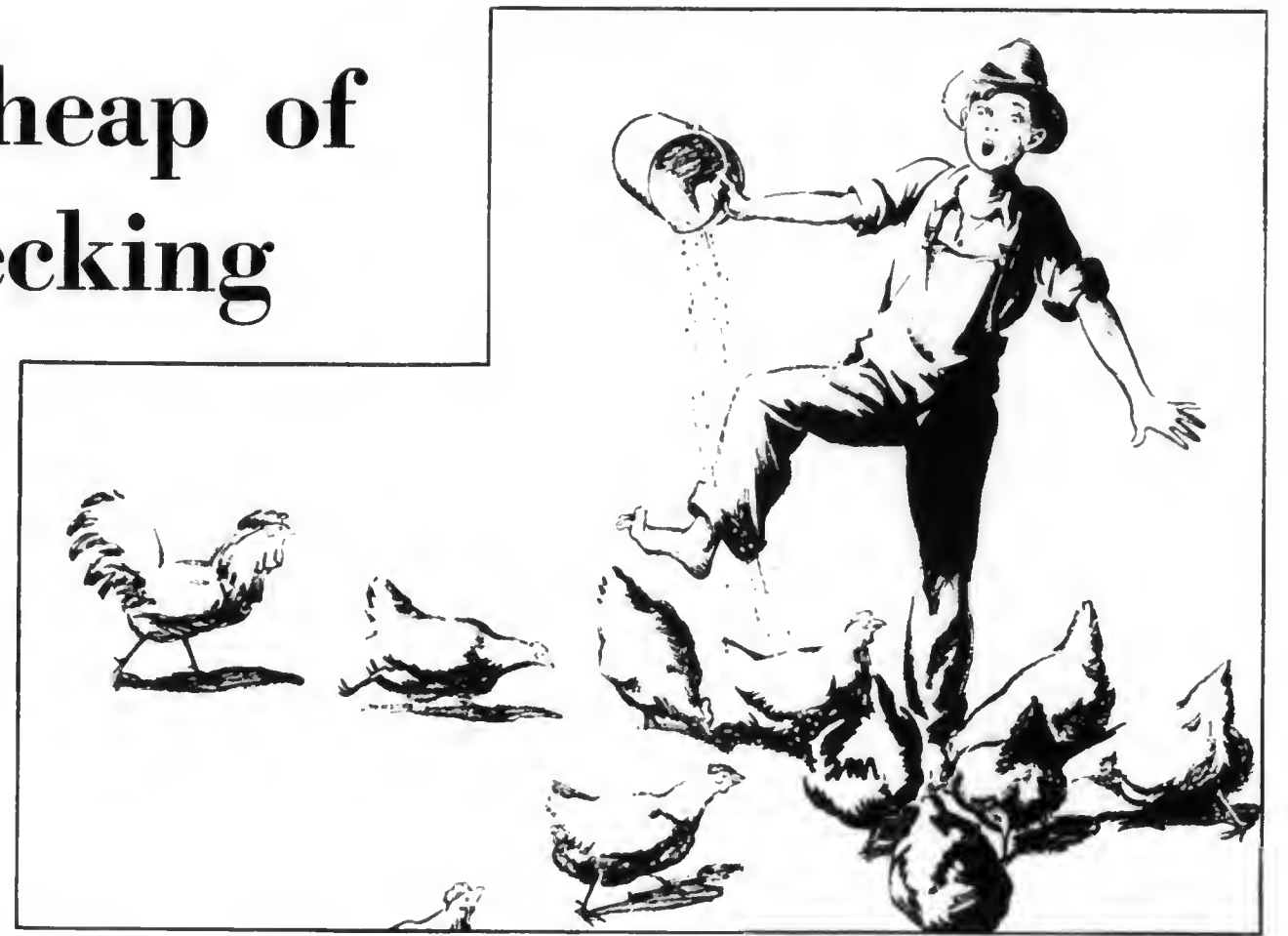
No one can tell us it doesn't hurt when you get your toes pecked by half a dozen old hens.

We know a lot of farmers who have troubles pecking at their feet. They shuffle around at the chores like they were walking on egg shells.

You know yourself that if your feet go bad, you can't work well—and your whole job is endangered. Your feet need the best care and protection.

One of the best ways in the world to give your feet the protection they need is to get the best boots you can find. Good-fitting, comfortable boots help protect your feet from all those troubles such as chilblains, blisters, itching feet, corns and bunions.

We realize that. So, when we build a pair of "U.S." Blue Ribbon Boots, we build them for foot comfort and health.



Each boot is built on a special aluminum last, right to the shape of your foot. There are 44 parts in every Blue Ribbon Boot, carefully put together by skilled craftsmen.

When it's finished and you slip it on, you find comfort at every point. Snug and comfortable around the ankle and heel—to prevent chafing. Soft, smooth flexing over the arches. Extra reinforcements at the wear points without too much weight. Rocking-chair soles with square, flat heels that put spring in your stride.

The boot that's comfortable is the boot that fits!



We'd like you to have this FREE book

Dr. Lelyveld, nationally-known foot-specialist, has written especially for the United States Rubber Company a little book entitled "The Care of Farmers' Feet." Mail the coupon for your copy today. It's free. You'll find it mighty handy to have around the house because it tells all about chilblains, bunions, itching feet, corns, excessive perspiration, etc., and suggests good common-sense remedies.

United States Rubber Company,
Dept. FFF-100, 1790 Broadway, New York.
Gentlemen: Please mail me your free book,
"The Care of Farmers' Feet."

NAME _____
ADDRESS _____
TOWN _____
STATE _____

"U.S." BLUE RIBBON



foot-saving footwear



Rubber footwear for the entire family. For work, dress and play.

"U. S." Blue Ribbon Boots—You can wear the "U.S." Blue Ribbon Boot all day long in the greatest of comfort. Moulded precisely to the shape of your foot. Smooth, even flexing over the instep that puts comfort into walking. Red uppers with white soles or Ebony black with white soles. Three lengths—knee, medium, hip.

"U. S." Blue Ribbon Puttees—All rubber arctic—The Walrus is a heavy-duty overshoe built for the hardest usage and yet so light that it doesn't tire you when you have lots of walking to do. Washes off clean in a hurry. Four, five, or six buckles.

Stylish Gaytees—The modern farm wife wants style and color in her overshoes. And Paris style authorities say that Gaytees are the most stylish women's overshoes in the world. Many beautiful colors and fabrics to choose from. Gaytees come in cloth or all rubber—in high or low uppers. Snap fastener, Kwik-glide fastener, or 4 buckles. Look for the name "Gaytees" in the shoe.

Keds for growing feet—The fact that star athletes the country over choose Keds, proves their foot comfort and health qualities. For growing feet they give barefoot freedom and encourage the feet to healthy growth—yet they give the proper protection. Recommended by physicians and gymnasts.



On Our Way to Connecticut

I WILL try to write you of the interesting things as they took place. We (my sister, her husband and I) left Danville in the wee hours of the morning, 3:30 a. m. Riding towards Bloomsburg, a hazy red was discerned in the east. Too early for sunrise our curiosity was aroused. On arriving in "Bloom" we found it to be a terrible blaze devouring the car shop. It was awesome, in the dark, to see firemen battling flames that would not be overcome. Here we lost our route due to side street detours.

Entering March Chunk the smoke hung low and descending into the town was like going down into some dark pit. The stone cobbled, walled street with its quaint buildings was just like looking into my geography at Switzerland.

Of course March Chunk is known as the "Switzerland of America." I would have been pleased to stay and ramble through the town for it certainly did invite investigation. We breakfasted in that place. If you peered upward as you left the place, hundreds of feet, you could see the mighty mountain that walled the town. The highway was a winding, constantly ascending route, as we left the town.

Better than Pennsylvania

Entering New York state we could see the difference in many things. I don't like to say so, (since it is against our own loved state) but things looked so much better; the farms were much nicer, well kept, with an air of prosperity. Lakes began to appear, young people canoeing, playing tennis, swimming and taking hikes. The highways are wonderfully shaded.

We ferried across the Hudson at Newburgh into Beacon, N. Y. Nearing the end of our long journey we passed through the busy city of Waterbury and saw the golf course where our Presidents sometimes play golf.

Governor Trumbull's home in Plainville is very exclusive with beautiful lawn. In the same little town was the "Little White Church" where Florence and John Coolidge were married. That interested me a lot. We spent a day at Hartford. Its capitol building is not as large as ours in Harrisburg, (thankful I have something to boast) though it is quite artistic and has beautiful lawns, flowers and fountains.

And Another Fire

Before leaving the capital city we spent an afternoon at Elizabeth Park, which is noted for its world-famed Rose Gardens. It has lily-ponds with stone bridges spanning them. These two features alone compensate one for the trip, let alone the scenery that unfolds itself as you drive along. The old, old homes that date back to Washington's time are simply things you have to see for yourself to appreciate.

Mark Twain's memorial is something to see. The "Travelers' Tower" in Hartford is one of the seven largest buildings and incidentally our Radio Station WTIC is there. There are multitudes of parks filled with children all day long.

I was born in Bristol, Conn., so we visited there a whole afternoon. As

The Young People



Class in Vocational Agriculture, St. Mary's High School, St. Mary's, West Virginia

I started this with a remark on fire so I will close. It was dark when we made our return trip home. Passing through Unionville, Conn., we came upon firemen who were putting out a fire. It was a gas station, completely destroyed, together with the owner's home. Mary V. Kundra, Montour county, Pa.

The Hunter's Predicament

By DOROTHY LOGUE

(A story that needs an ending.)

TWO little bears were playing in the sun at the top of a hill. They had just eaten all the huckleberries they could hold, and were engaged in the pleasant pastime of slapping each other around with their paws. All at once something happened. Billy Bear had Teddy Bear in a "scissor hold" around the neck, when—bang!!

A hunter who had been after rabbits all morning shot his gun off so suddenly that it startled all the wild animals. What do you suppose was the hunter's surprise when two chubby bears came rolling down the hill instead of the hare at which he had shot? But the little bears were not hurt, only scared.

Which Way Shall He Go?

They had tumbled into the creek and had got very wet. Just as they came "woof-woofing" out of the water, a low growl was heard around the curve of the hill.

Mr. Hunter hadn't been exactly scared at the little bears, but now here was a big one to contend with. Old Mrs. Bear had a large black bass in her mouth that she had caught by sitting on a rock and swiping it with her paw. Whether the growl was a call to her little ones to come and get the fish or a growl of anger at the distress of her little ones, the hunter didn't know, but he surely wanted to run.

Which way, he didn't know, and furthermore, he hadn't much time to decide. He couldn't run up the steep hill, for the bears lived up there—maybe. He couldn't go around the curve, for old Mother Bear was there. He couldn't go the opposite way because old Mrs. Bear could run—and if he swam the creek he'd have to leave his shotgun behind, and he had prived it

so highly. Then, too, he had left a pile of rabbits on the ground back there just before he had shot off the gun. He pondered just a moment but it seemed like years to him. Then he thought of an idea.....

What was the hunter's great idea? One of our readers will finish the story and receive a prize. Hurry the story ending back to Young People's Editor, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

Little Folks' Corner

Timmy Twitchet and the Big Box

By RUTH PLUMLY THOMPSON

THE attic where Timmy Twitchet lived was both exciting and comfortable. Lodged as he was in the old colonial doll house, abandoned by the children and dolls, this bachelor mouse had the most luxurious home in the village.

The eight mouse families who had retired for greater safety to the top of the house, always referred to the attic as the village, and a village it was to these small cheery industrious little bodies. Not only a village but, as I said above an exciting and comfortable village, for every month or so, the two legs, who occupied the rooms below added new buildings and improvements to the community.

Now it was a flower pot, or bandbox, now a foot stool or an old valise. One bandbox served the mice splendidly as a music hall and another as a school and public library. The suit case, after an opening had been cut, made an excellent club house and the members of the Crumb and Cheese Society had many merry meetings in its spacious interior. So when the mice heard thumps upon the stair, they could hardly contain themselves. As soon as the footsteps died away, out they would rush in a body to see what the two legs had left for them.

"It's a chest," squeaked Tiny Wee Bit one rainy afternoon, as the clan gathered round a huge mahogany object that had been unceremoniously dumped in the center of the space they were pleased to call "The Park."

"Pshaw, it's only another old box," sighed Hepsibah Fuzzle, the mouse school mistress. "But here comes

The Big Storm

I WANT to tell you about the cyclone we had this summer. It was the biggest storm I ever saw or hope to see. It began to rain and in just about two minutes the wind and rain had broken the latch of one door and the rain was beating up to the ceiling of our dining-room. We were all kept busy mopping the floors.

My brother, Warren, had started for the cows and he drove them past the silo just before it fell to the ground. The storm also took some of the roof from the barn and about fifteen apple trees. Our neighbor's silo and many of his trees were also destroyed. Laura Lawton, Tioga county, Pa.

Prize-Winning Drawings

THE two pictures at the top of the page were drawn by one of our young artists whose name has appeared here several times—Fred Pollock.

A prize has been sent to Fred and there will be one for any of our artists whose work appears in these columns. Send your contributions to Young People's Editor, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

GREAT TO BE WELCOMED LIKE THE
The Pennsylvania Farmer's simply great
And when it comes I cannot wait
But sit right down and fill my note
With all the good things I find in it.
My brother's most as bad as I.
He'd rather have it than his pie.
And, oh, he laughs enough to die.
At all the fun that's in it.
We think it is the best we get
And to you all we feel in debt.
When it comes, too long we sit.
A-reading all that's in it.
Pennsylvania, Marion G. Eckert.

PASSING EVENTS IN PICTURES



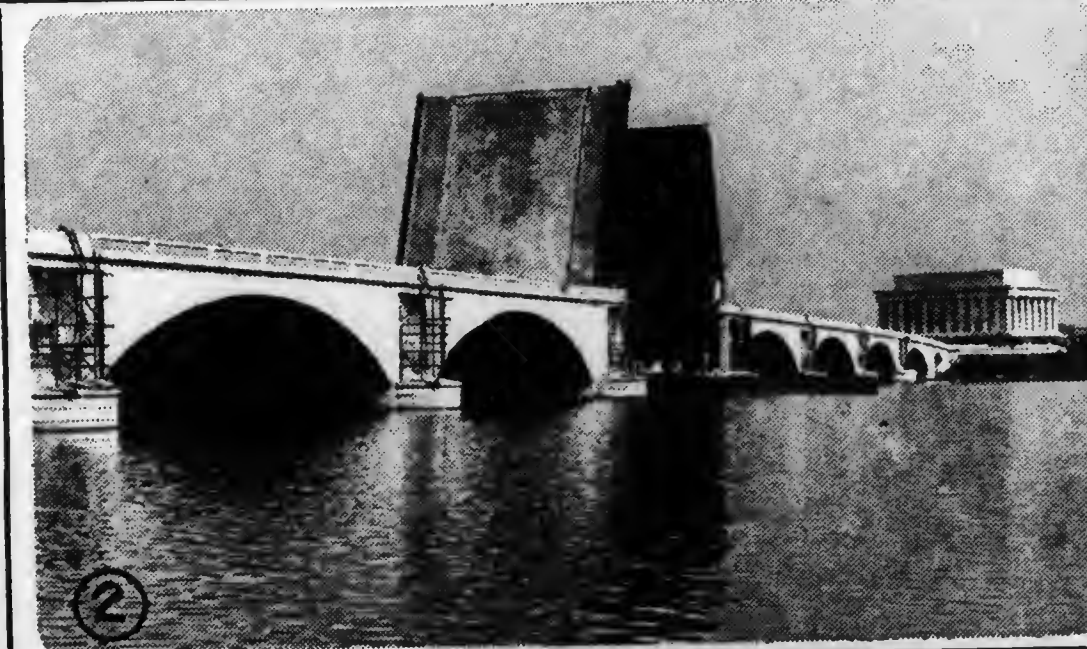
1



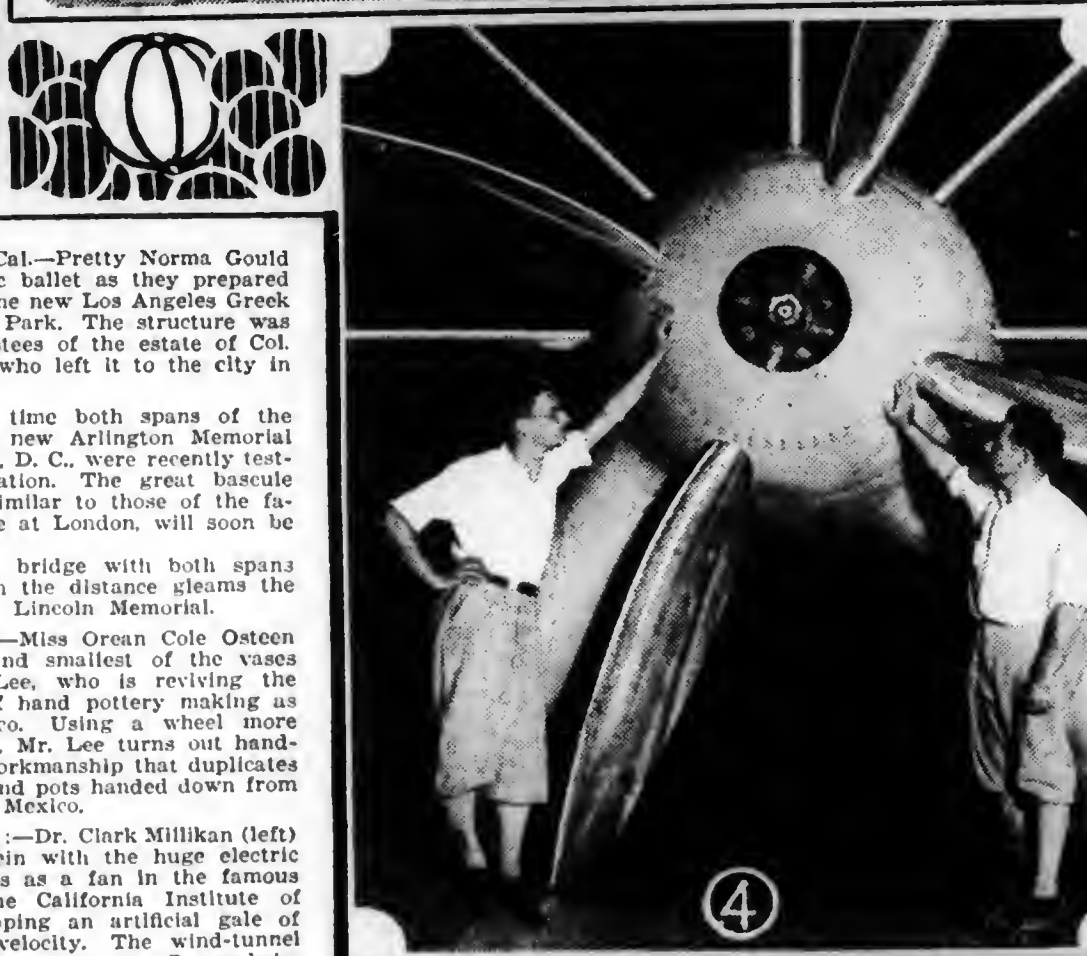
3



5



2



4

1. Los Angeles, Cal.—Pretty Norma Gould dancers in a classic ballet as they prepared for the opening of the new Los Angeles Greek Theater in Griffith Park. The structure was erected by the trustees of the estate of Col. Griffith J. Griffith who left it to the city in his will.

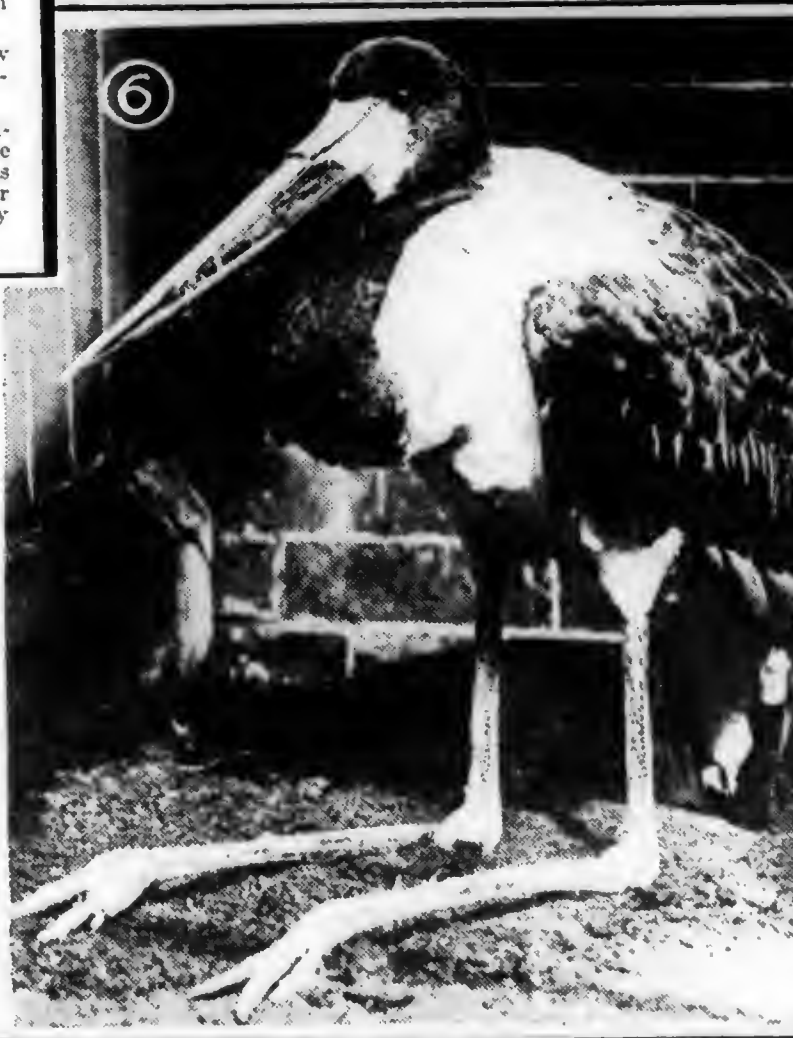
2. For the first time both spans of the drawbridge of the new Arlington Memorial Bridge, Washington, D. C., were recently tested by actual operation. The great bascule spans, which are similar to those of the famous Tower Bridge at London, will soon be in daily use.

3. Glendale, Cal.—Miss Olean Cole Osteen with the largest and smallest of the vases made by Frank Lee, who is reviving the ancient industry of hand pottery making as practiced in Mexico. Using a wheel more than a century old, Mr. Lee turns out hand-made utensils of workmanship that duplicates the antique vases and pots handed down from the old makers in Mexico.

4. Pasadena, Cal.—Dr. Clark Millikan (left) and Dr. A. L. Klein with the huge electric motor which serves as a fan in the famous wind-tunnel at the California Institute of Technology—developing an artificial gale of 150-miles-an-hour velocity. The wind-tunnel was built with money from the Guggenheim Fund for the Advancement of Aeronautics.

5. Sandy Hook, N. J.—A view of the new 12-inch mortar railway gun, designed to attack invading battleships along the coast.

6. London, England.—One of the new saddle-bill storks in his new quarters at the zoo here. The saddle-bill stork, which has the distinction of being the rarest member of the stork family, is easily recognized by the band across its bill.



6

Paul Elmont Harned and his baby sister, Virginia Louise, of West Virginia.

Farmer's Business Letter

Business is somewhat better, the experts tell us, and certainly more favorable talk is heard in spite of now lows in some markets, including the stock market. The wheat market was up and down this week, mainly down, with the close showing a little loss from the week's opening, but still about a nickel above the low time last week. In the wheat trade there is evident quite an extensive feeling to the effect that wheat is too low. Corn trailed along with wheat, little action and little change in price. Husking reports are not good, so far as they have gone.

Crop Report

The October crop report put the yield of corn at 2,046,716,000 bushels, a gain of 63,000,000 bushels over the September report and comparing with a crop of 2,622,180,000 bushels last year. Total wheat harvest was figured at 839,612,000 bushels, against 806,508,000 bushels last year. The 1930 oats crop was estimated at 1,410,761,000 bushels, compared with 1,235,654,000 last year.

Jumpy Hog Market

The hog market is inclined to be jumpy. Eleven markets had 445,000 hogs this week, against 408,000 last week and 478,000 the same week last year. Average price for the week moved up to \$9.65, a nickel under a year ago, but 65 cents above last week. Consumer demand for pork continues very good and loins at wholesale have advanced 20¢ compared with 17¢ a week ago. Storage stocks of both pork and lard are the lowest in years. Slaughter under federal inspection continues far below last year or recent years, and for the first nine months of this year total hog slaughter of 32,103,684 was 8 per cent under the first three quarters of last year, and 4 per cent under the average of the past ten years, which included some light years.

Trading in the futures market was light again, with not much change in quotations. Light weights sold at \$8.80 and mediums at \$8.90 for December delivery. These prices were 10 to 20 cents above last week.

Healthier Tone in Cattle

Cattle marketing was more moderate and trade developed a healthier tone. Average price of steers advanced to \$10.80, a gain of 25 cents over last week. Top yearlings brought \$13.35, against \$13.15, and top heavies \$12.60 against \$12.25 last week. More significant than this, however, was the fact that this week over 1,200 steers sold at \$12.75 and up against only about 350 head last week.

A government report showed that shipments of stocker and feeder cattle into the 11 corn belt states during the three months July to September this year were about 25 per cent smaller than for the same months last year, 30 per cent smaller than the five-year average and much the smallest in 12 years.

Feeder trade here this week has been only moderate, due to light supplies available. Very few offerings were available after the first two days of the week. Top load went out at \$8.90, with bulk of a fair to good kind at \$7.97.50.

Better Lamb Trade

During the first half of the week lambs did better than in a long time, with tops reaching \$9.25, though at the close \$8.85 was making the best. Receipts were heavy than last week, and of course larger than a year ago, as they have been right along. The average lamb price this week at \$8.05 was 75 cents above last week, though \$4.85 under a year ago. Lamb is the cheapest meat in the market now and consumption is large. Feeder offerings were not as large as in recent weeks, but demand was strong. Best feeders are selling at \$6.50-7, with \$7.25 the extreme top, but a lot of lambs have moved as low as \$6.15 to weight and quality.

Government reports are that the shipments of feeding lambs and sheep into the eleven corn belt states for the three months July to September this year were only about 77 per cent as large as for these three months last year and about 50 per cent of the five-year average movement for these three months. They are smallest since 1923. But it is added that developments

up to October 1 were "too uncertain" to give dependable indications. Many lambs will still be taken out. October is usually the largest month in this trade.

Chicago, Oct. 11, 1930. Watson

Produce Market Review

THE Philadelphia egg market was firm during the past week with a good demand for the light receipts of fresh nearby stock. Graded nearby white eggs were very scarce and there were hardly enough of them to meet the needs of the trade. Nearby stock of medium quality met only a fair demand. Hennerly whites sold as high as 64c a dozen in fairly large sized lots. Ordinary stock from both nearby and western sections brought as low as 27c according to the U. S. Department of Agriculture's quotations.

Storage stocks have been inactive. Prices on storage eggs have been forced down due to the slump in future trading which again hit new lows for the season. There were occasional sales of storage eggs at 27¢28c and higher in a small way.

The New York egg market advanced sharply during the week on good demand. The finest nearby white eggs advanced about 12c a dozen while browns were about 5c higher. Later in the week dealers reported that the demand for the best eggs had fallen off somewhat. White eggs ranged from 22c per dozen on very small stock up to 62c for closely selected extras. Brown eggs brought 28¢50c and mixed colors 18¢37c.

Butter Unsettled

The eastern butter markets were unsettled during the past week but prices of top scores showed little change. The cheaper and lower grades were quite plentiful and sold at somewhat lower prices. The Chicago market was weak and registered declines of 1¢2c a pound. There is considerable uncertainty as to the future trend of the market.

LIVESTOCK

PITTSBURGH

Manure's supply was about 70 carloads and it included all kinds except army and navy. Trade was slow and prices lower on most classes of cattle, the decline ranging from a quarter to a half dollar. One lot of nice but not finished steers from Harrison county, Ohio, purchased brought \$9 per cwt., aside from which no steers brought over \$8.75. Good grassers, both handy and heavy, brought \$8.60-8.75. Very useful fleshy steers went at \$8.65-8.75, considerably better than those which brought the same money last week. Fair light and handy-weight grassers, with flesh enough to make them useful to killers, sold around \$7.50, and ordinary light killers around \$7. Only fair light steers, or those of plain quality, went at \$6.65-6.50, a few plain heavy steers brought \$7.50. Heifers were lower, with \$7.50 the outside price. Fat cows were not much changed, best being \$5.75-6. Canners and meat brought \$2.50-2.75. Bulls were lower, some sold at \$6.25-6.50, bullocks largely \$5.50-5.75. A few feeder steers brought \$7.97.75.

Choice yearling steers None here. Choice steers \$8.75-9.00. Good to choice, 1,200 lbs. \$8.25-8.75. Fair to good, do. 7.50-8.25. Plain heavy steers 7.00-7.50. Choice handy-weight steers 6.00-6.50. Good butcher steers, 1,000 to 1,150 lbs. 5.00-5.25. Fair to good, do. 4.00-4.25. Ordinary to fair, do. 3.50-4.00. Common, do. 3.00-3.50. Good light butcher steers 7.25-8.00. Fair to good light steers 6.25-7.25. Common to medium, do. 5.00-6.00. Inferior light steers 4.00-5.00. Feeders Nominal. Stockers Nominal. Choice fat heifers 6.75-7.25. Good to choice heifers 6.25-6.75. Fair to good heifers 5.00-6.00. Common to fair heifers 4.00-5.00. Choice fat cows 5.00-5.50. Good to choice fat cows 4.00-4.50. Fair to good cows 3.50-4.00. Common to fair cows 3.00-3.50. Canners 2.50-2.75. Fresh cows, calf at side 5.00-6.00. Choice heavy bulls 6.25-6.50. Choice handy butcher bulls 5.00-6.00. Good handy bulls 4.00-5.00. Fair to good bulls 3.50-4.00. Common to fair bulls 3.00-3.50. Inferior bulls 2.00-2.50.

Hogs

Last week's hog market was up and down. The week opened with a light supply, about 20 double-deck carloads, and the week ended with a demand. The trade

The New York live poultry market was irregular during the latter part of the week. Both express receipts from nearby sections and freight receipts from more distant points for fancy fowls and chickens. Leghorn fowl were in light supply and in demand while chickens and pullets were quiet. Leghorn fowl were quoted at 15¢19c per pound, colored fowl at 22¢28c. Rock chickens at 25¢28c. Reds at 20¢24c and Leghorns at 20¢24c. Fresh receipts of dressed poultry were moderate and prices held steady under a fair demand. Broilers brought 25¢34c, chickens 25¢32c and fowl 20¢30c.

Apples Plentiful

Apple shipments have been heavy during the past week and have averaged over 1,000 cars daily but much of this stock is going into cold storage. Shipments from western New York and also from the western boxed apple sections have exceeded those made at this time last year. In general prices of eastern apples are 50¢75c per bushel lower than in 1929. Prices in New York and from about 50¢\$1.75 in Philadelphia. There are, however, only small lots bringing the top price in either market. The majority of eastern apples reflect the drought and are only of small to medium size.

The biggest feature affecting the potato situation is the release of the government crop report on Saturday. This report reflected an improvement in the potato crop during the month of September and according to conditions on October 1st the crop is estimated at 332,206,000 bushels, compared with expectations of 339,278,000 bushels on September 1st, or an increase of nearly 13,000,000 bushels. Maine and Pennsylvania showed substantial increases as well as Colorado and Idaho. The potato markets were generally weak and prices of Pennsylvania stock dropped about 10c per hundred pounds in most markets. Shipments have been very heavy and practically all markets report moderate to liberal supplies. Pennsylvania round whites sold at \$1.75-2 per 100-pound sack in most markets with Maine Green Mountains around \$1.90-2. W. R. W.

was rather slow at a little better than last week's closing prices. Good handy-weight hogs brought \$10.35-10.40. Heavy hogs were dull, those of around 350 lbs. going at top figures and heavier kind on down. Light hogs were scarce and so were pigs, not enough of either appearing to fill orders. Good light hogs would sell at \$10.25 and good pigs at \$10. Evidently the pigs are being fed instead of sacrificed. Sows of standard quality brought \$8.75.

Medium wts., 180-200 lbs. \$10.00-10.40. Heavy Yorkers, 165-180 lbs. 10.35-10.40. Light Yorkers, 125-150 lbs. 10.00-10.25. Pigs, 90-100 lbs. 9.75-10.00. Roughers 8.50-8.75. Stags 5.00-6.00.

Sheep and Lambs

Monday's receipts were liberal, 20 double-deck carloads or about 5,000 head. The sheep market was very dull and lower. Probably choice handy wethers would not command over \$1 per cwt., and few here over \$3.50. Inferior sheep brought very low prices, down to \$1 per 100 lbs., and many all could be sold. Lambs were dull and lower. One deck was sold early at \$8.25 per cwt., but later \$8 was the outside figure and buyers were not in a hurry to bid over \$7.75. Culls went out at \$5.75 largely, a few \$6.50. There was no business in feeder lambs. Good to best wethers \$3.75-4.00. Good mixed 3.25-3.75. Fair to good, do. 2.50-3.25. Common to fair 2.00-2.50. Inferior sheep 1.00-2.00. Good to choice lambs 7.75-8.00. Medium, do. 6.50-7.00. Culls and common, do. 4.00-6.00.

Cattle

Monday's supply was liberal about 900 head when all were in. The market was a dollar lower at \$13 for standard quality and \$9.11 for second quality. Many at \$11. Heavy and thin calves brought \$6.50-6.75, some rather decent heavies around \$7.

LAMCASTER

Cattle—Oct. 13.—Today's receipts were about 4,800 head. The market was slow, beef steers and yearlings being weak to 25c lower, sheepest steady to weak, bulls about steady, while stockers and feeders were slow at about steady prices. Top of the market was \$9.50 for fed yearlings. Best medium-weight grassers brought \$9. Two hundred calves were on sale. The market was 25¢50c higher. Best vealers brought \$11 per cwt.

Hogs

The supply amounted to 1,200 head. The market was steady. Handy-weights are quoted at \$11.15-15.00, lights and heavies \$10.25-11.25.

Produce Quotations

PHILADELPHIA

Butter.—Higher than extras, 42¢45c; score, 41c; 90 score, 37c.
Eggs.—Fancy select, 35¢43c; extra, 33c; firsts, 28¢; second, 20¢22c.
Poultry.—Live fowls, 23¢28c; broilers, 20¢25c; old roosters, 16¢18c; pigeons, 15¢20c; ducks, 15¢18c; turkeys, 25¢30c.
Fruits.—APPLES, N. J. & Pa., 4¢; various varieties, mostly 4¢50c. GRAPES, Concord, 12¢; bskts., 45¢48c; N. Y., 4¢; PEARS, N. J., 3¢; bskts., 25¢50c; PEACHES, N. J., bus. bskts., Elberta, 22¢25c.

Vegetables.—BEANS, N. J. (snap), 1 bskt., green, 50¢75c; LIMA BEANS, N. J., 1 bskt., 75¢85c; BEETS, Pa. & N. J., 1 1/2c; CARROTS, Pa. & N. J., 1 1/2c; CELERY, N. J. hearts, bch., 1¢2c; CORN, Pa. & N. J., sacks, 100 ears, \$1.15-1.50; CARROTS, Pa. & N. J., bskts., 20¢35c; CAROLE, Pa. bus., 25¢40c; BCG PLANT, N. J., 4¢; bskts., 25¢75c; LETTUCE, N. J., cts., 40¢60c; PARSLEY, Pa. & N. J., bu. bunches, mostly 50c; PUMPKINS, N. J., 3¢; bskts., 20¢30c; SPINACH, N. J., 3¢; bskts., 20¢75c; POTATOES, N. J., 1 bskt., 20¢75c; SWEET POTAT., 1 bskt., 20¢75c; PEAS, 30¢35c; 1 pk. RADISHES, 5¢8c bunch.

LAMCASTER

Butter.—Country butter, 45¢50c; creamery butter, 47¢50c.

Eggs.—Fresh, 30¢54c.
Dressed poultry.—Chickens, 12¢25c each; springers, 65¢\$1.25 each; ducks, 15¢20c each; squabs, 25¢50c each.

Fruits.—A P. L. B. S., 15¢25c; 1 pk. PEACHES, 20¢25c qt. GRAPES, 9¢10c qt. QUINCES, 20¢25c qt.
Vegetables.—BEANS, (string), 20¢25c; BEANS, (lima), 20¢25c pint box; BEETS, 5¢8c bunch; CABBAGE, 8¢15c head; CARROTS, 8¢10c bunch; CAIL, FLOWER, 10¢30c head; CELERY, 8¢10c bunch; CUCUMBERS, 5¢10c each; EGGS, PLANTS, 10¢20c each; ENDIVE, 15¢ head; LETTUCE, 8¢15c head; ONIONS, 20¢25c 1 pk.; POTATOES, 15¢20c 1 pk.; 15¢25c 1 bu.; SWEET POTATOES, 25¢30c 1 pk.; PEPPERS, 25¢50c each; PARSLEY, 25¢50c bunch; PEAS, 30¢35c 1 pk.; RADISHES, 5¢8c bunch.

YORK

Butter.—Country, 40¢45c; separator, 30¢55c.

Eggs.—Fresh, 35¢45c; pullet, 28¢34c.

Poultry.—Hens, 20¢24c; springers, 25¢28c; dressed hens, 75¢\$1.75 each; springers, dressed, 60¢\$1.50.

Fruits.—APPLES, 10¢45c 1 pk.; 15¢17c per bu. PEARS, 10¢ box, 15¢ 1 pk.; PEACHES, 20¢40c 1 pk.
Vegetables.—POTATOES, 10¢15c 1 pk.; BEANS, 20¢25c 1 pk.; CABBAGE, 5¢12c 1 head; CELERY, 5¢15c stalk; LETTUCE, 10¢20c 1 head; CARROTS, 5¢ bunch; BEETS, 5¢ bunch; CAIL FLOWER, 8¢10c head; TURNIPS, 10¢15c box, \$1.00 per bu.; SPINACH, 20¢ 1 pk.; BEANS, (stringless), 25¢30c 1 pk.; LIMA BEANS, 20¢30c pt.; TOMATOES, 10¢25c 1 pk.; PEPPERS, 25¢ each; PICKLES, 10¢15c doz.

HAY MARKET REVIEW

Hay markets were generally steady to slightly lower during the week ending October 10. Light offerings continued in fair demand but the market was somewhat restricted by good fall pastures in many of the central and eastern states, according to the Weekly Hay Market Review of the United States Bureau of Agriculture. Economics. Pastures have improved greatly in the drought areas which received adequate rainfall during September, but they are still below average except in Nebraska and some of the western states.

Official October 1 estimates place the time hay crop at \$4,000,000 tons compared with 10,000,000 tons last year and a five-year average of 9,300,000 tons. Wild hay was placed at 12,000,000 tons compared with nearly 13,000,000 last year and alfalfa at 2,500,000 tons compared with nearly 3,000,000 tons last year and a five-year average of about 2,900,000 tons. Quotations in carlots, based on U. S. grades, follow:

Chicago—Alfalfa, No. 1, \$26; No. 2, \$22; timothy, No. 1, \$22; No. 2, \$20; No. 3, \$17; No. 2 mixed, \$20.
New York—Timothy, No. 1, \$27; No. 2, \$25.50.
Pittsburgh—Timothy, No. 1, \$21.50.

PITTSBURGH MILK PRICES

The following net prices are announced by the Pennsylvania Cooperative Sales Company to dealers as the basis of payment to producers for 3.5 per cent milk delivered during September:

District 1.—Country plant, base, \$2.75; surplus, \$1.92. Direct shipped base, \$3.35; surplus, \$2.20.
District 2.—Base, \$3.05; surplus, \$1.71.
District 4.—\$2.47.
District 5.—Base, \$2.81; surplus, \$1.92.
District 6.—Base, \$3.15; surplus, \$1.92.
District 7.—Base, \$3.15; surplus, \$1.92.
District 8.—\$2.77.
District 10.—Base, \$2.95; surplus, \$2.08.
District 12.—Base, \$2.95; surplus, \$1.75.

FEED MARKET

The following quotations are for treated and nearby shipment October 7th, according to the U. S. Bureau of Agriculture. For instance, they show the approximate cost of feed per ton tall in 100 lb. sacks and grain per bushel in carlots arrival at Philadelphia and Scranton rate points.
Barley, \$2.75-2.90; standard middlings, \$3.10-3.25; cottonseed meal, \$3.25-3.40; 100 lb. sack, \$3.50-3.60; white oats, 10¢; No. 2 yellow corn, \$1.00.

Gardner's Harvest

By GILBERT S. WATTS

BOTH the calendar and the chill morning air, that is frequently lasting until noon or later, remind us that summer very definitely is a thing of the past. It is fall. Excesses in the warmer, southern corners of the state freezing weather cannot be many weeks ahead. These are simple facts.

But time flies, particularly when it is very busy from early to late. It is very busy long periods of rainy weather come at this season and delay harvesting. And other causes may arise, and do arise, with the result that scarcely a year passes without serious losses from freezing of late vegetables in some home and market gardens.

Occasionally severe freezes occur earlier than the average. Here in central Pennsylvania celery was planted one year as early as October 15. Every gardener should set a "dead line," a date before which it is best to have everything in storage. Personal and neighborhood experience will establish this. Ours is November first.

Then how easy it is to allow inefficient time to get everything done. Through our "dead line" is a month ahead, as this is being written we are digging potatoes heavily, spring sweet pumpkins and squashes and getting storage facilities in readiness for the final clean-up of the early crops, celery, cabbage and the lot crops.

EARLY in the summer we went out one day to top-dress a three-acre old black raspberry patch with 100 pounds per acre of nitrate of soda. The plants are set in rows which are eight feet apart. (Incidentally that seems a foot wider than necessary under our conditions. The installation started this spring is in ten-foot rows).

But to get back to the story the question arose of whether it would be better to scatter the nitrate in a strip on either side of each row or to broadcast over the entire soil surface. Which would you have done?

Being rather new at the raspberry game I determined to find out just how wide the feeding roots ramified through the soil. Selecting a place where absolutely no weeds could be found I took a hoe and carefully began scraping away the soil kept loosened by the cultivator running through the centers of the middles. As soon as I reached undisturbed soil a permanent network of fine roots was apparent. Some of these were traced back and we found that the roots of the plant not only reached the middle but that considerable crossing had taken place. As a result the fertilizer was broadcast over the entire area.

As the harvest progresses we are zealously following our usual program of planting cover crops as soon as the land is released. When it is too late for anything else we fall back on rye and continue with it all acreage will go into winter with soil improvement crop. To secure maximum benefit from the very late seedings 1931 plantings will be arranged in so far as possible for early plowing of the well-advanced green manures and slightly later plowing of the rye. In fact oats and soy beans sown in midsummer after early vegetables will be plowed in November.

ALONG with the urgency of time in harvesting it is well to keep in mind the importance of having ample supplies of soil suitable for plant growing under cover. If fall rains set in before this job is completed it may be very difficult, except in sandy bottomlands, to secure soil in good condition.

Out Goes the Manure from the barn to the field—in a jiffy



McCormick-Deering FEATURES

Eight Roller Bearings
New, Non-Wrapping Saw-tooth Beater
Improved Spiral
Low, Easy-to-load, Reinforced Box
Convenient levers
Oscillating Front Axle
Six Conveyor Speeds

MANURE LEACHING in piles or in a pit waiting to be spread doesn't help much to boost land values and crop yields. To get full benefit it should be SPREAD PROMPTLY AND EVENLY.

The McCormick-Deering Manure Spreader is the machine that makes the job SIMPLE and SPEEDY. Built with a low, steel-braced box, it loads quickly. Roller bearings make it light draft. Six conveyor speeds give you close control of the spread. And the improved type beaters and the wide-spreading spiral maintain an even spread of finely pulverized and shredded manure right down to the last forkful.

Take the time to examine the McCormick-Deering Manure Spreader on the McCormick-Deering dealer's floor. Find out how well this spreader is built and how profitably it will serve you.

INTERNATIONAL HARVESTER COMPANY
606 So. Michigan Ave. of America (Incorporated) Chicago, Illinois
Branches at Pittsburgh, Harrisburg, Philadelphia, Pa. and at 95 other points in the United States.

IT SPREADS LIME, too. Ask the McCormick-Deering dealer about the "Lime-spreading Attachment."

The McCormick-DEERING Manure Spreader

DANZER MILK BOTTLE STERILIZER



Equipped with cover (not shown) which encloses bottles, allowing sufficient space for loading and unloading bottles.
Positive Hot Water Sterilization
Pennsylvania's New Milk Law effective September 1st, requires that all bottled milk sold at retail must be in sterilized bottles.
The DANZER STERILIZER
It operates according to directions, will sterilize bottles in most requirements of Bureau of Health Control, U. S. Dept. of Health.
Made in Two sizes:
No. 1 Cylinder capacity, 10 rows of bottles each, No. 1 Cylinder capacity, 10 rows of 5 bottles each.
Ask your Dairy Supply Dealer or write for information and prices.
DANZER METAL WORKS
HAGERSTOWN, MD.

Before You Buy An Engine Get This Comparison Chart



60th ANNIVERSARY OFFER
Don't order any engine until you get my FREE CHART. Then you can compare and decide which engine will give you the most value for your money.
NO MONEY DOWN—A YEAR TO PAY
With my new plan you can learn for yourself how much money a Lifetime WITTE can make for you... how much time and labor it will save... either your own or hired help. Prove these facts on your own place... Before you pay me a single penny.
FACTORY-TO-YOU PRICES
On all Lifetime WITTE Engines, Pumps and Sawing Outfits, including my latest engines, the best ever made... Enclosed—Self Oiling—with Timken Roller Bearings that never require adjustment, guaranteed for a lifetime! Saves Fuel and Oil. It's the cheapest hired man on earth.
ENGINE COMPARISON CHART—FREE
Write today for my new free ENGINE BOOK and COMPARISON CHART and receive a copy of my amazing NO MONEY DOWN OFFER.
WITTE ENGINE WORKS
5817 Eastern Ave. Kansas City, Mo.
TIME TESTED SINCE 1870

Solving the Buying Problem

Good farming methods will produce bigger and better crops. A well-planned marketing campaign will bring you higher prices. And well-informed buying will bring you more for every dollar spent. This is the foundation on which the master farmer builds his economy program.
The third leg becomes an easy matter when you read the advertisements in your farm paper. Reading them saves you time and actual money. You can learn what goods are standard, where to get them, how much you are expected to pay.

Advertisements in this paper can be depended upon.

Please Mention Pennsylvania Farmer When Writing to Advertisers

CONTROL BACTERIA...IN MILK

85% of the bacteria that gets into milk at the farm comes from contact with non-sterile utensils and containers. Much well water used to rinse utensils is contaminated with bacteria. Eliminate bacteria with the B-K plan of sterilization.



1 Milking machine parts should first be rinsed with clear, cold water, followed by hot water—then soaked in a B-K dilution.



2 To prevent contamination and make easy cleaning, run a B-K dilution through separator just before using.

Use B-K according to direction charts in every package. They comply with Federal Law. Send for Bulletin 124 on Dairy Sterilization.

GENERAL LABORATORIES, Inc., 1015 Dickinson St., Madison, Wis.

FEED for GREATER PROFIT DRIED BEET PULP!

Dried Beet Pulp gets more milk from dairy cows—faster, more economical gains from beef cattle and sheep. **No other feed can do the same work for you—Dried Beet Pulp** is a vegetable feed—the only one of its kind distributed commercially!

Dried Beet Pulp strengthens the animal's constitution—adds variety to the ration and **aids the digestion of other foods**—regulates the bowels and eliminates those "off-feed" days. There's nothing better for nursing ewes and growing lambs.

PRICES LOW

Dried Beet Pulp is always profitable to feed but with present low prices it is the most economical and profitable supplemental feed to be obtained. Dairy men and feeders are using it in great quantities—see your dealer and get started on Dried Beet Pulp—your profits will increase.

Write for free booklet "Profitable Feeding".

THE LARROWE MILLING COMPANY
Dept. P. F. 2 Detroit, Michigan



HERD INFECTION

Dr. Roberts says: "Watch out for symptoms of HERD INFECTION, such as Failure to Breed, Failure to Clean, Scours and Colic in Calves, Garget, Cow Pox and Shortage of Milk. There may or may not be a loss of Calves. Send in a confidential report of your herd and Dr. David Roberts will tell you without charge what is wrong."

Ask for a free copy of "The Cattle Specialist" and how to get the "Practical Home Veterinarian" a live stock doctor book.
DR. DAVID ROBERTS VETERINARY CO., INC.
126 Grand Ave., Waukegan, Wis.

BE SURE TO SAY "I saw your advertisement in Pennsylvania Farmer" when writing advertisers.

Farm & Dairy By L. W. LIGHTY

NUBBINS are not listed in our feed tables, but should be because this season most folks are feeding nubbins if they feed corn, and not a few are asking questions as to the care and feeding value.

I need not explain that a nubbin is a crippled ear of corn. Many of these nubbins are solid and mature and are about the same feeding value as larger ears, but plenty are soft in the cob and some soft in the grain. These must be spread out on the floor or arranged so the air can circulate through the mass, or they will mould and soon be unfit to feed.

When it comes to the feeding value we lack "authority" except what the cow says, and most folks will agree that the cow is very fond of the fresh sweet nubbins and if fed liberally responds well. Possibly the cow likes corn in this form because it is so handy to take and easily crushed, but we know that a feed that is relished has more value than one that is disliked. I believe we may safely assign the value of crushed corn-and-cob meal to our crop of nubbins in making up the feeding ration. And I am sure it will pay us to take the best care of the nubbins and keep them from moulding and in good feeding condition. Real good corn is scarce in many sections and the price will be high at best.

Cull Potatoes

The weather that produced nubbins in the corn field also shows up in the potato field with a great proportion of culls, and questions come relative to feeding these culls to the cows. Cows are not fond of potatoes and often will not eat them except when covered with ground grain to improve the flavor.

The protein in the potato is negligible as a cow feed, but there is more starch and energy in the potato than in the sugar beet, and a small quantity may be of real value to the cows. A large proportion in the ration is not advisable.

Do not consider potatoes a concentrate, as they are a diluted roughage. If you will cook them for the hogs and chickens you will make more out of the culls than in feeding them to the cows.

Next Year's Hay Crop

Every good farmer is possessed of considerable foresight. As he looks at his new seedling he promptly wonders where his next year's hay crop is to come from. Not a few have plowed the wheat stubble sown to grass and seeded it down again, as there was no grass left after the hot drouth. Others are planning to put that area in corn, but all are exercised because it breaks up the regular rotation of crops and the problem of next year's hay crop is not solved. I have an unusual number of letters relative to this matter and every farmer I talk to brings up the subject.

Of course we say to the inquirer that you must sow a special crop for hay such as oats, Canada peas, soy beans, Sudan grass, cow peas and so on. All these crops will make fair to good hay and in a favorable season yield well. But when the summer is over what have you? A bare field that has to be seeded again. We not only lose the hay crop of our regular seeding of the timothy and clover, but the worst of all is we lose the sod we had expected to use as the foundation for a good corn crop in 1932. That is the way we build up the fertility of our soil.

A few farmers prepared special seed beds and sowed grass seed in the beginning of September, but there was not moisture enough to more than germinate the seed. The plants will go into winter very small and unless well covered with snow will not survive. October first finds our soil dry and the towns suffering for want of water.



"My Cows Drank Double the Amount of Water"

AND with it came a marked increase in milk production! Enough to quickly pay for the new stalls, stanchions and water bowls that made the increase possible.

That is the experience of August Guy, R. F. D. No. 2, Reese, Michigan.

Hundreds of farmers have told us the same thing. They have learned that installing the best in dairy barn equipment means a big saving on work plus substantial increase in quantity and quality of milk.

We have collected twelve of these stories in an interesting booklet called "Cow Comfort". That booklet will help you to earn more from your dairy herd. A copy is yours for the asking. Just use the coupon.

And we'll gladly include a catalog if you check the coupon.

THE NEY MANUFACTURING CO.
Canton, Ohio

THE NEY MFG. CO.
Canton, Ohio

Please send me a copy of "Cow Comfort" without charge. [] Check here if you want catalog No. 150 Name _____ Street or Rural Route _____ City and State _____

BRILLIANT LIGHT for NIGHT WORK!

Has in before dew-set. National Carbide in the RED DRUM gives you the most light for your money. Prompt service everywhere. Ask your dealer. If he cannot supply you, write us.

NATIONAL CARBIDE SALES CORP.
Lincoln Building New York, N. Y.



NATIONAL CARBIDE

FARQUHAR SAWMILLS

Produce good Fall and Winter profits. They saw accurate lumber which commands top notch prices. Easily operated. Built in sizes to suit power. Chain Oiling or Roller bearings. Power Receder, Modern and a money maker.

Write for Bulletins 629 and 629-A.
A. B. FARQUHAR CO., Limited
Box 646, YORK, PA.

To know what to buy—read the advertisements. They will keep you informed of the latest and best products of the manufacturers. Their aim is to meet your needs. You will find that time spent in reading the advertisements is time well spent. Read them regularly, with care, and when answering, mention Pennsylvania Farmer.

C. T. A. Reports

Northern Huntingdon County

THE Northern Huntingdon County Dairy Herd Improvement Association finished its third year with 23 whole-year and two part-year members. The total number of cows for the whole or part of the year was 415.

The Association was in operation for two years in 1921 and 1922. The results for those two years and for the three later years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1921	271.20	6202	251.7
1922	265.20	6225	240.8
1923	331.93	7618	293.2
1924	315.51	7578	296.1
1925	292.37	8441	322.1

Fourteen herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Milk	Fat
X. E. Black	Mixed	10228	390.6
G. Gilliland & Son	R.H.	11071	375.0
John T. Martin	Mixed	9454	372.3
D. Alton Grazioplene	R.G.H.	10050	370.3
F. W. Eyer & Sons	R.G.H.	9966	369.3
James S. Cummings	G.G.	7819	363.6
H. L. Grazioplene & Son	R.G.B.S.	9058	360.3
Ellenberger Brothers	Mixed	8543	316.9
James C. Oliver	R.G.H. & G.G.	9318	342.7
I. W. Vert	R.G.H.	9533	341.2
Tussey Brothers	R.G.H.	9553	338.3
W. C. Henderson	R.G.B.	7991	333.2
G. J. G. G.	R.G.G.	6571	318.2

Least Cox R. S. Clark, County Agent.
John Chenoweth, Tester.

Adams County

THE Adams County Cow Testing Association finished its third year with 21 whole-year and two part-year members. There were 306 cows in the Association during all or part of the year. Records for the Association for the three years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1923	253.07	8387	289.4
1924	225.67	8193	299.2
1925	211.27	8960	312.9

Thirteen herds with an average of five or more cows produced an average of over 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Milk	Fat
T. N. Cochran	R.H.	12480	421.3
R. M. Spangler	R.G.H.	12093	412.5
E. C. Williams	R.H.	11886	411.9
John C. Brown	R.H.	10779	371.4
Geo. E. Mott	R.G.H.	9357	339.2
Hiram H. Miller	R.H.	9463	331.7
Ray W. Brown	R.A.	8101	317.0
Paul Price	R.G.H.	9097	313.4
Mrs. C. J. Weaver	R.H.	8974	306.2
Elmer H. Leach	R.G.H.	8836	305.2
William Orndorff	R.H.	8339	302.7
Elmer J. Hurr	R.G.H.	6110	301.8
Harry E. Brown	R.G.H.	8891	300.00

Lee McCauslin, M. T. Hartman, County Agent.

First McKean County

THE First McKean County Cow-Testing Association finished its third year with 16 whole-year and three part-year members. The total number of cows for the whole or part of the year was 413. In addition, there are five members who will close their testing year in August, at which time a report will be made out for them. The results for the Association's first three years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1927	372.01	7137	275.4
1928	117.62	6731	266.1
1929	272.46	6961	280.7

Five herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Milk	Fat
W. S. Fuller	R.H.	6989	383.4
Tengstrand Bros.	Grade	5882	377.0
A. W. Huff	R.H. & R.A.	9531	352.4
Walsh Bros.	R.G. & H.	8835	336.9
F. M. Johnston & Son	R.G.	6590	311.5
H. T. Abbey,	W. A. Ross,		
Tester,	County Agent.		

No other Farm Electric Plant Battery like it

THIS NEW Delco-Light IRONCLAD Battery Will Modernize Your Farm Electric Plant and Give 50% More Service

DELCO-LIGHT, pioneer of farm electricity, brings you today its latest development—the Delco-Light IRONCLAD Battery. Put a magnifying glass to the positive plate of this great new battery and you'll see why this is the most important news since Delco-Light developed the combination idea in electric plants.

Here's what the magnifying glass shows. Instead of patted-on active material, attached to flat plates, you'll see row on row of tiny slotted hard rubber tubes—holding the material inside where it doesn't flake away.

This slotted tube principle—applied for the first time to farm electric plant batteries by Delco-Light, gives you half again more actual service than the ordinary battery. This marvelous Delco-Light IRONCLAD Battery will modernize your individual electric plant. It's a battery you can depend upon for super-service.

Tiny Tubes Revolutionize Battery Service

The secret of its unbelievably long life is the positive plate with those slotted rubber tubes. This revolutionary new type of construction makes the Delco-Light IRONCLAD good for over 4,000,000 watt hours of service! That means the Delco-Light IRONCLAD gives you more service for your money than any other battery.

Of course this marvelous new battery is different in many ways. It's built heavier all around with generous reserve power to meet any emergency. It lasts longer. Gives better service and costs less to use.

Write for the Facts

This battery is now available for use with your farm electric plant. Before you get a battery, get all the facts about this great new



You can get this famous battery from any authorized Delco-Light dealer. Be sure the battery you buy has "Delco-Light IRONCLAD" on the cover of the jar, on the battery strap, on the negative plate and on the glass battery jars.

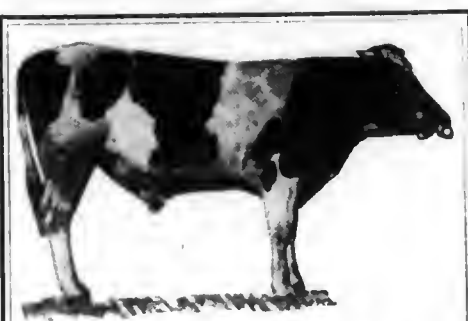
Delco-Light IRONCLAD. They are contained in an interesting illustrated folder. It's free. Write for your copy today.

DELCO-LIGHT COMPANY
Dept. D-65, Rochester, N. Y.

DELCO-LIGHT Ironclad Battery

The nearest distributors are listed below. In addition there is a Delco-Light Dealer in every community.

Henry Clayton, 600 S. Delaware Ave., Philadelphia, Pa.	Suburban Electric Development Co., 5624 Penn. Ave., East End, Pittsburgh, Pa.	J. B. Mitchell & Co., Inc., 25 W. Mt. Royal Ave., Baltimore, Md.	Domestic Electric Co., Inc., 39 W. 45th St., New York, N. Y.
--	---	--	--



RETREAT FARMS

Retreat Farms offer for sale 4 yearling bulls, now ready for service, from dams with official records, for \$125.00 and up. This is cheaper than you can afford to raise them. We also have fall bull calves offered from \$30.00 up. Write us for pedigrees or come and see us.

Theo. J. Sampson, Supt., Retreat, Pa.



Holsteins

Write today for "Holsteins for Profit"

Room F602, 230 East Ohio Street, Chicago, Ill.

SWINE

Chester White Pigs—8 weeks old, \$4.00. For breeding \$8.00 each. Mixed breeds, \$3.75. C. LEWIS ZAYLOR, Wyandotte, Pa.

125 BIG TYPE, pedigreed Chester Whites from big breeders and big litters. Priced right and shipped on approval. C. E. Cassel, Hershey, Pa.

BIG TYPE CHESTER WHITES, spring gilts, breds ready for service, inquired, priced reasonably. R. B. Heller, R. 7, Bluffton, Ind.

Feeding pigs, 15 to 50 lbs., \$4.50 to \$8.00 according to size. Truck delivery on large lots. Mostly Poland-Chinas. Stanley Short, Cheswold, Del.

HAMPSHIRE PIGS Eight weeks old, both sexes, red, free. J. J. RAILING, R. 2, Shippensburg, Pa.

DUROCS Big Type Reg. Durocs. Priced right. Shipped on approval. Visit us or write your wants. G. O. Sander, Hummelstown, Pa.

BIG SPOTTED POLAND-CHINAS—Spring pigs, spring gilts, bred cows, pigs all ages. BOYD HAMMAN, Shiloh, Ohio

Reg. Spotted Poland-Chinas, Fall pigs ready. Few bred gilts, bred cows and breds ready for service. A. M. Kennel, R. 2, Honey Brook, Pa.

SHEEP

REG. SHROPSHIRE and SOUTHDOWN RAMS. Good individuals. They will please you. Won both championships on Shropshires at three state fairs this fall. Hyllmede Farm, Beaver, Pa.

REGISTERED SHROPSHIRE RAMS from imported ancestry. L. M. HEIGHWAY, Bluffton, Ohio

SHROPSHIRE and OXFORD RAMS for sale. Registered. Pedigree furnished. Private residence. BROCKLEY FARMS, Atwater, Ohio

Fancy Southdown Rams and Ewes from one of the oldest breeders in Ohio, at reasonable prices. A. T. Freed & Son, Basil, Ohio

For Sale Rams of heavy C Type. Delaine blood. Big quality. Horns long & heavy. Bred in Ohio. Leo R. Scott & Sons, Burgettstown, Pa.

Registered Cheviot, Southdown, Dorset, Oxford rams and ewes. Priced with the times. Myron H. Loffer, DeGraff, Ohio

DAIRY CATTLE

For Sale. Jersey Bull Calf

ready for light service. Imported, Oct. 3, 1925. Dam dropped 4 calves and produced 1,804 lbs. fat (C.T.A. records) in 4 years, starting at 2 years 4 mos. of age. This calf won 1st in class and grand championship at Grove City, Pa. Show this fall. Price \$125.00 delivered. Two young bulls at correspondingly lower prices, one from silver medal dam. Accredited herd. JAY D. BAKER, R. 4, Grove City, Pa.

For Sale Two dams, registered Jersey bull calves, will be one year old in Nov. Also several heifers, one bred, and young calves. See my exhibit at the Frederick Fair, Oct. 21 to 24. Federal Accredited Herd. HERBERT E. ATHEY, Keadysville, Md.

Registered Jersey bred heifers and import calves, both sex, of best breeding. D. J. KEEFE, McVeytown, Pa.

GUERNSEY Bulls 11 and 23 months of age. Harry G. Binkley, R. 2, Conestoga, Pa.

AYRSHIRES All ages and both sexes—dams—sire out of a 3-1-1-1 dam, all reasonable. ROBERT B. ROYER, Farm near Prescott, R. D. 1, Lebanon, Pa.

AYRSHIRE CATTLE of the best blood lines. Herd T. B. Accredited. Animals of both sex and all ages. Oa. B. McConnell, Wellington, Ohio

Holstein Bulls for sale, from an accredited herd, from calves to serviceable age, from K. P. O. P. 52, the 1,100-lb. butter and 4 1/2 bull, also females. For sale at reasonable prices. Large herd to select from. Fred J. Brown, Dubois, Penna.

For Sale High-grade Holstein springers, ear-banded, tested, pedigrees. Glarner & Bringsold, West Concord, Minn.

FOR SALE—Purchased Holstein cows, due to freshen this fall, one yearling bull and Accredited Gilbey Bros., Ulster, Bradford Co., Pa.

CATTLE

BUCK & DOE RUN VALLEY FARMS. Herd of Cattle. Poland China line. Hampshire Sheep. Draft horses. THE SAINT AMOUR COMPANY, Norristown, Penna.

Angus Cattle at reasonable prices. Write BAYARD BROS., Waynesburg, Pa.

D. S. POLLEN HEREFORDS—A fine selection. Cows, heifers, bulls. Come or write. CHAS. D. GILL, Millersport, Ohio

REGISTERED HEREFORDS A solid herd of the best Woodford breeding. Cows, heifers and bulls for sale at reasonable prices. Large herd to select from. Fred J. Brown, Dubois, Penna.

NORWALTON MILKING SHORTHORNS—Good young bulls for sale. ALBERT SMITH, Union City, Pa.

CONTROL BACTERIA...IN MILK

85% of the bacteria that gets into milk at the farm comes from contact with non-sterile utensils and containers. Much well water used to rinse utensils is contaminated with bacteria. Eliminate bacteria with the B-K plan of sterilization.



1 Milking machine parts should first be rinsed with clear, cold water, followed by hot water—then soaked in a B-K dilution.



2 To prevent contamination and make easy cleaning, run a B-K dilution through separator just before using.

Use B-K according to direction charts in every package. They comply with Federal Law. Send for Bulletin 124 on Dairy Sterilization.



3 Cans, buckets, strainers, coolers, fillers and bottles should be rinsed with a B-K dilution just before using.

GENERAL LABORATORIES, Inc., 1015 Dickinson St., Madison, Wis.

FEED for GREATER PROFIT DRIED BEET PULP!

Dried Beet Pulp gets more milk from dairy cows—faster, more economical gains from beef cattle and sheep. No other feed can do the same work for you—Dried Beet Pulp is a vegetable feed—the only one of its kind distributed commercially!

Dried Beet Pulp strengthens the animal's constitution—adds variety to the ration and aids the digestion of other foods—regulates the bowels and eliminates those "officed" days. There's nothing better for nursing ewes and growing lambs.

PRICES LOW

Dried Beet Pulp is always profitable to feed but with present low prices it is the most economical and profitable supplemental feed to be obtained. Dairy men and feeders are using it in great quantities—see your dealer and get started on Dried Beet Pulp—your profits will increase.

Write for free booklet "Profitable Feeding".

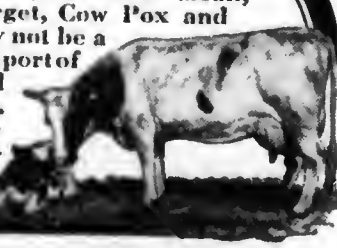
THE LARROWE MILLING COMPANY
Dept. P. F. 2
Detroit, Michigan



HERD INFECTION

Dr. Roberts says: "Watch out for symptoms of HERD INFECTION, such as Failure to Breed, Failure to Clean, Scours and Gitters in Calves, Garget, Cow Pox and Shortage of Milk. There may or may not be a loss of Calves. Send in a confidential report of your herd and Dr. David Roberts will tell you without charge what is wrong."

Ask for a free copy of "The Cattle Specialist" and how to get the "Practical Home Veterinarian," a life star's doctor book.
DR. DAVID ROBERTS VETERINARY CO., INC.
126 Grand Ave., Waukegan, Wis.



BE SURE TO SAY "I saw your advertisement in Pennsylvania Farmer" when writing advertisers.

Farm & Dairy

By L. W. LIGHTY

NUBBINS are not listed in our feed tables, but should be because this season most folks are feeding nubbins if they feed corn, and not a few are asking questions as to the care and feeding value.

I need not explain that a nubb is a crippled ear of corn. Many of these nubbins are solid and mature and are about the same feeding value as large ears, but plenty are soft in the cob and some soft in the grain. These must be spread out on the floor or arranged so the air can circulate through the mass, or they will mould and soon be unfit to feed.

When it comes to the feeding value we lack "authority" except what the cow says, and most folks will agree that the cow is very fond of the fresh sweet nubbins and if fed liberally responds well. Possibly the cow likes corn in this form because it is so handy to take and easily crushed, but we know that a feed that is relished has more value than one that is disliked. I believe we may safely assign the value of crushed corn-and-cob meal to our crop of nubbins in making up the feeding ration. And I am sure it will pay us to take the best care of the nubbins and keep them from moulding and in good feeding condition. Real good corn is scarce in many sections and the price will be high at best.

Cull Potatoes

The weather that produced nubbins in the corn field also shows up in the potato field with a great proportion of culls, and questions come relative to feeding these culls to the cows. Cows are not fond of potatoes and often will not eat them except when covered with ground grain to improve the flavor.

The protein in the potato is negligible as a cow feed, but there is more starch and energy in the potato than in the sugar beet, and a small quantity may be of real value to the cows. A large proportion in the ration is not advisable.

Do not consider potatoes a concentrate, as they are a diluted roughage. If you will cook them for the hogs and chickens you will make more out of the culls than in feeding them to the cows.

Next Year's Hay Crop

Every good farmer is possessed of considerable foresight. As he looks at his new seedling he promptly wonders where his next year's hay crop is to come from. Not a few have plowed the wheat stubble sown to grass and seeded it down again, as there was no grass left after the hot drouth. Others are planning to put that area in corn, but all are exercised because it breaks up the regular rotation of crops and the problem of next year's hay crop is not solved. I have an unusual number of letters relative to this matter and every farmer I talk to brings up the subject.

Of course we say to the inquirer that you must sow a special crop for hay such as oats, Canada peas, soy beans, Sudan grass, cow peas and so on. All these crops will make fair to good hay and in a favorable season yield well. But when the summer is over what have you? A bare field that has to be seeded again. We not only lose the hay crop of our regular seeding of the timothy and clover, but the worst of all is we lose the sod we had expected to use as the foundation for a good corn crop in 1932. That is the way we build up the fertility of our soil.

A few farmers prepared special seed beds and sowed grass seed in the beginning of September, but there was not moisture enough to more than germinate the seed. The plants will go into winter very small and unless well covered with snow will not survive. October first finds our soil dry and the towns suffering for want of water.



My Cows Drank Double the Amount of Water

AND with it came a marked increase in milk production! Enough to quickly pay for the increase possible.

That is the experience of August Guy, R. F. D. No. 2, Beebe, Michigan.

Hundreds of farmers have told us the same thing. They have learned that installing the best to dairy barn equipment means a big saving on work plus a substantial increase in quantity and quality of milk. We have collected twelve of these stories in an interesting booklet called "Cow Comfort." That booklet will help you to save more from your dairy herd. A copy is yours for the asking. Just use the coupon.

And we'll gladly include a catalog if you check the coupon.

THE NEY MANUFACTURING CO.
Canton, Ohio
Established 1879

THE NEY MFG. CO.
Canton, Ohio
Please send me a copy of "Cow Comfort" without charge.
[] Check here if you want catalog No. 179
Name _____
Street or Rural Route _____
City and State _____

BRILLIANT LIGHT for NIGHT WORK!



Hay is before dew-wet. National Carbide in the RED DRUM gives you the most light for your money. Prompt service everywhere. Ask your dealer. If he cannot supply you, write us.

NATIONAL CARBIDE SALES CORP.
Lincoln Building New York, N. Y.
..... Coast to Coast Service

NATIONAL CARBIDE

FARQUHAR SAWMILLS

Produce good Fall and Winter profits. They saw accurate lumber which commands top notch prices. Easily operated. Built in sizes to suit power. Chain Oiling or Roller Bearings. Power Receder, Modern and a money maker.

Write for Bulletins 629 and 629-A.

A. B. FARQUHAR CO., Limited
Box 646, YORK, PA.

To know what to buy—read the advertisements. They will keep you informed of the latest and best products of the manufacturers. Their aim is to meet your needs. You will find that time spent in reading the advertisements is time well spent. Read them regularly, with care, and when answering, mention Pennsylvania Farmer.

C. T. A. Reports

Northern Huntingdon County

THE Northern Huntingdon County Dairy Herd Improvement Association finished its third year with 23 whole-year and two part-year members. The total number of cows for the whole or part of the year was 615.

The Association was in operation for two years in 1921 and 1922. The results for those two years and for the three later years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1921	271.20	6202	251.7
1922	265.20	6225	240.8
1923	351.93	7618	298.2
1924	315.51	7575	296.1
1925	292.37	8441	322.1

Fourteen herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Lbs. Milk	Lbs. Fat
K. E. Black	Mixed	9742	410.9
G. Gilliland & Son	Mixed	10228	380.6
John T. Martin	R.H.	11071	375.0
Alton Grainger	Mixed	9454	372.3
F. W. Eyer & Sons	R.G.H.	10050	370.3
Taylor Brothers	R.G.H.	9966	369.3
James S. Cummings	G.G.	7819	363.6
E. L. Grainger & Son	R.G.B.S.	9058	360.8
Emmerger Brothers	Mixed	8543	346.9
James S. Oliver	R.G.H. & G.G.	9318	342.7
L. W. Wert	R.G.H.	9533	341.2
Passer Brothers	R.G.H.	9553	338.3
K. C. Henderson	R.G.B.	7991	338.2
	G.J. & G.G.		
Leah Cox	R.G.G.	6571	318.2

John Chenoweth, R. S. Clark, County Agent.

Adams County

THE Adams County Cow Testing Association finished its third year with 21 whole-year and two part-year members. There were 306 cows in the Association during all or part of the year. Records for the Association for the three years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1923	253.07	8387	289.4
1924	222.67	8193	299.2
1925	221.27	8960	312.9

Thirteen herds with an average of five or more cows produced an average of over 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Lbs. Milk	Lbs. Fat
T. S. Spangler	R.H.	12489	421.3
E. C. Spangler	R.G.H.	12093	412.5
E. C. Williams	R.H.	11886	411.9
John C. Brown	R.H.	10779	371.4
Geo. E. Meyer	R.G.H.	9957	339.2
William H. Miller	R.H.	9163	331.7
Wm. W. Brown	R.A.	8401	317.0
Paul Price	R.G.H.	9097	313.4
Wm. C. J. Weaver	R.H.	8974	306.2
Major H. Leav	R.G.H.	8836	305.2
William Orphanage	R.H.	8839	302.7
Harry J. Herr	R.G.H.	6140	301.8
Harry E. Brown	R.G.H.	8894	300.00

Lee McCauslin, M. T. Hartman, County Agent.

First McKean County

THE First McKean County Cow-Testing Association finished its third year with 16 whole-year and three part-year members. The total number of cows for the whole or part of the year was 413. In addition, there are five members who will close their testing year in August, at which time a report will be made out for them. The results for the Association's first three years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1923	372.04	7137	275.4
1924	317.62	6731	266.1
1925	372.46	9561	290.7

Five herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Lbs. Milk	Lbs. Fat
F. S. Fuller	R.J.	6999	283.4
Emmerger Bros	Grade	9882	377.0
L. W. Wert	R.H. & R.A.	9531	352.4
Emmerger Bros	R.G. & G.H.	8895	336.3
E. M. Johnston & Son	R.G.	6990	311.5
H. T. Abbey			
Tester	W. A. Ross, County Agent.		

No other Farm Electric Plant Battery like it

THIS NEW Delco-Light IRONCLAD Battery Will Modernize Your Farm Electric Plant and Give 50% More Service

DELCO-LIGHT, pioneer of farm electricity, brings you today its latest development—the Delco-Light IRONCLAD Battery. Put a magnifying glass to the positive plate of this great new battery and you'll see why this is the most important news since Delco-Light developed the combination idea in electric plants.

Here's what the magnifying glass shows. Instead of pasted-on active material, attached to flat plates, you'll see row on row of tiny slotted hard rubber tubes—holding the material inside where it doesn't flake away.

This slotted tube principle—applied for the first time to farm electric plant batteries by Delco-Light, gives you half again more actual service than the ordinary battery. This marvelous Delco-Light IRONCLAD Battery will modernize your individual electric plant. It's a battery you can depend upon for super-service.

Tiny Tubes Revolutionize Battery Service

The secret of its unbelievably long life is the positive plate with those slotted rubber tubes. This revolutionary new type of construction makes the Delco-Light IRONCLAD good for over 4,000,000 watt hours of service! That means the Delco-Light IRONCLAD gives you more service for your money than any other battery.

Of course this marvelous new battery is different in many ways. It's built heavier all around with generous reserve power to meet any emergency. It lasts longer, gives better service and costs less to use.

Write for the Facts

This battery is now available for use with your farm electric plant. Before you get a battery, get all the facts about this great new

DELCO-LIGHT Ironclad Battery

The nearest distributors are listed below. In addition there is a Delco-Light Dealer in every community.

Henry Clayton, 600 S. Delaware Ave., Philadelphia, Pa.	Shubnigg Electric Development Co., 5624 Penn. Ave., East End, Pittsburgh, Pa.	J. B. Mitchell & Co., Inc., 25 W. Mt. Royal Ave., Baltimore, Md.	Domestic Electric Co., Inc., 39 W. 45th St., New York, N. Y.
--	---	--	--

SWINE

Chester White Pigs—9 weeks old, \$1.00. For breeding \$5.00 each. Mixed bred pigs, \$3.25. C. LEWIS TAYLOR, Waukegan, Pa.

125 BIG TYPE, polled Chester Whites from big breeders and big litters. Priced right and shipped on approval. C. E. Cassel, Hershey, Pa.

BIG TYPE CHESTER WHITES, spring gilts, born ready for service, immaculate, priced reasonable. R. E. Heller, R. 7, Bluffton, Ind.

Feeding Pigs, 15 to 50 lbs. \$4.50 to \$8.00 according to size. Truck delivery on large lots. Mostly Poland-Chinas. Stanley Short, Cheswold, Del.

HAMPSHIRE PIGS Eight weeks old, bred by J. J. RAILING, R. 2, Shippensburg, Pa.

DUROCS High type Reg. Durocs, blood right, shipped on approval. Visit us or write your wants. G. C. Sauley, Hummelstown, Pa.

BIG SPOTTED POLAND-CHINAS—Spring yearlings, spring gilts, tried sows, pigs all ages. BOYD HANMAN, Shiloh, Ohio.

Reg. Spotted Poland-Chinas. Full pigs ready, few bred gilts, brood sows and litters ready for service. A. M. Keenel, R. 2, Honey Brook, Pa.

SHEEP

REG. SHROPSHIRE AND SOUTHDOWN RAMS. Good individuals. They will please you. Won both championships on Shropshires at three state fairs this fall. Hyllmide Farm, Beaver, Pa.

REGISTERED SHROPSHIRE RAMS from imported ancestry. L. M. HEIGHWAY, Bluffton, Ohio.

SHROPSHIRE AND OXFORD RAMS for sale. Ready for service. Priced right. Reasonable. BROCKETT FARMS, Atwater, Ohio.

Fancy Southdown Rams and Ewes from one of the oldest breeders in Ohio, at reasonable prices. A. T. Freed & Son, Basil, Ohio.

For Sale Rams of heavy C Type Delaine horns. Horns, Mutton and Wagon Comb. L. E. R. Scott & Son, Burrettstown, Pa.

Registered Cheviot, Southdown, Dorset, Oxford rams and ewes. Priced with the times. Myron H. Laffer, Defrad, Ohio.

Blackhead Scotch Highlands. The hardest of all breeds, fine quality mutton, fine & abundant game, Ewes. Oak Grove Farms, Mechanicsburg, O.

DELAINE MERINOS of the Champion strain. 11 & 12 type, large size, heavy shewers. White. S. H. SANDERS, R. 2, Ashland, Ohio.

HORSES

ANNUAL PUBLIC SALE PERCHERON MARES, Fillies, Young Stallions, Wednesday, Oct. 23, W. S. CORSA, Whitehall, Illinois

DAIRY CATTLE

For Sale. Jersey Bull Calf

Ready for light service. Dropped Oct. 3, 1929. Dam dropped 4 calves and produced 1,304 lbs. fat (C.T.A. records) in 4 years, starting at 2 years 4 mos. of age. This calf won 1st in class and grand championship at Grove City Dairy Show this fall. Price \$150.00 delivered. Two younger bulls at correspondingly lower prices, one from silver medal dam, accredited herd. JAY D. BAKER, R. 4, Grove City, Pa.

For Sale Two dairy registered Jersey bull calves. Also several heifers, one bred and young cows. See my exhibit at the Frederick Fair, Oct. 21 to 24. Federal Accredited Herd. HERBERT E. ATHEY, Reedsville, Md.

Registered Jerseys blooded heifers and import or natives, both sex, of best breeding. D. J. KENNEP, McVeytown, Pa.

GURNSEY Bulls 11 and 23 months of age. Harry G. Binkley, R. 2, Conestoga, Pa.

AYRSHIRES All ages and both sexes—dams—sire out of a 1st lb. dam—price reasonable. ROBERT B. ROYER, Farm near Prescott, R. D. 1, Lebanon, Pa.

AYRSHIRE CATTLE of the best blood lines. Herd T. B. Accredited. Animals of both sex and all ages. G. E. McConnell, Wellington, Ohio.

Holstein Bulls For sale, from an accredited herd, from calves to serviceable age, from K. P. O. P. 52, the 1,100-lb. butter and 4% bull. Also females. Crystal Spring Stock Farm, Littlestown, Pa.

For Sale High-grade Holstein springers, carload lots, tested country. Glarner & Bittigold, West Concord, Minn.

For Sale Pure-bred Holstein cows, due to freshen this fall. One veal calf, 100 lbs. Accredited. Gilroy Bros., Ulster, Bradford Co., Pa.

CATTLE

BUCK & DOB RUN VALLEY FARMS Hereford Cattle—Poland China Hogs—Hampshire Sheep—Drift Horses. THE SAINT AGOUR COMPANY, Mercersville, Penna.

Angus Cattle at reasonable prices. Write BAYARD BROS., Waukegan, Pa.

D. S. POLLED HEREFORDS—A fine selection. Cows, heifers, bulls. Come or write. CHAS. D. GILL, Millersburg, Ohio.

REGISTERED HEREFORDS—A select herd of the best Woodford Hereford cows, heifers and bulls for sale at reasonable prices. Large herd to select from. Fred J. Brown, DuBois, Penna.

—NORWALTON MILKING SHORTHORNS—total young to 15—see ad. ALBERT SMITH, Union City, Pa.

Wealth from Desert

(Continued from page 5.)

helps to keep this octogenarian young in spirit—and in body too.

I have been asked about the revolutions accomplished and threatened in South America. All have their origin in industrial or financial depression and the unrest it always engenders. South America is suffering from over production, from extravagance in public affairs incited by past prosperity, and from a few experiments social, political and industrial. Brazil has over-produced coffee and speculated in government control of it. Peru's copper and oil and cotton are all too abundant and too cheap. Bolivia's silver and tin are cheaper than for many years. Chile's nitrate and copper industries are not so prosperous—as their lesser production and lower prices indicate. Most of these countries have contracted a considerable foreign debt and all of them depend much on the production of the things just mentioned for public revenues as well as general prosperity.

But a revolution is not so serious a matter in these comparatively small countries, where it means little more than a change of executives in most cases. The ruling class goes on ruling, with a change in personnel rather than in the essentials or even the form of the government. The government of Chile has proved rather stable in the face of difficulties, but there is more or less unrest everywhere and will be as long as business conditions are not good. The form of all these governments is republican, but most of them are really more constitutional in form than in reality.

On our way back we stopped at Balboa and Panama, then after going through the Canal at Cristobal and Colon. The weather was much cooler than when we went down, less humidity. Cuba came next, and we spent a fine afternoon at the Experiment Station. There we had a wonderful dinner in which Cuban products and dishes figured, everything except a few condiments grown on the station farms. The roast pig, the chicken with rice, the alligator pears and the pineapples were much enjoyed. The pineapples, a variety which will not stand shipment even by fast freight, were a revelation to us who had never tasted the like before.

On the way back to Havana we visited the farm of President Machado—500 acres in citrus fruits, herds of Angus and Jersey cattle and a lot of Duroc-Jersey pigs. Cuba is not in a highly prosperous state. At Havana a hungry Irishman whom I fed was so grateful that he kissed my hand—a new experience for me—and assured me that we would meet again. Senor Ernesto Sanchez, who was the guide and friend of our excursionists there last winter, welcomed us at the dock and a couple of Penn State graduates came aboard to see Professor White.

It was hot at Havana and as long thereafter as we remained in the Gulf Stream, but cool at New York. I had more plunder than the law allows, so it took some time for me to pass the customs, but I was treated with the greatest courtesy. I have always found our customs officers courteous and fair.

As I got aboard the train at New York two men, one an army officer and the other a civilian, brought in two Gold Star mothers, just returned from France, both of them colored. One lives in Nashville, the other in Chicago. They had never met before going to France, but the name of the slain son of each was Charles H. Wright.

Probably this is enough of my researches and observations in South America. The records may not be scientifically accurate, as I never carried a note book on any tour, but I hope they have brought to the reader a few things of interest. The United States of America is the best country on earth, but we can still learn a few things from and about other nations.



GROWTH

is what makes pigs pay

PART OF THE FEED your pigs eat

• each day goes for body maintenance and the balance goes for growth. There is only one way to produce pork at low cost, and that is to feed for rapid growth. Each extra day that you feed pigs to bring them to the finished weight means added feed costs, slower turnover, and less profit.

Amco Hog Profit Feed (18% protein) is an all around feed—suitable for brood sows or for growing pigs. It is complete and highly digestible, carrying adequate proteins, carbohydrates, and minerals. Pigs like it because of the wide variety of ingredients.

The variety of proteins will give better gains than a single ingredient, such as tankage. No additional minerals are required, which makes a further saving. Amco Hog Profit Feed can be fed dry or in slop—hand fed or in self feeder. It will produce firm, smooth pork rapidly and economically.

Make the Most of Your Home Grown Grains

Do you have your own home grown grains?

Amco 28% Supplement Pig Meal and Amco

40% Supplement Hog Meal will make complete balanced rations out of your grains,

and your pigs will grow much faster.



THE FORMULA
MAKES THE FEED

Amco

Hog Profit Feed
contains:

Fish Meal, Digester
Tankage, Cottonseed
Oil Meal, Soybean
Oil Meal, Old Process
Linseed Oil Meal,
Wheat Standard
Middlings, Ground
Barley, Corn Feed
Meal, Fine Ground
Alfalfa Meal, Coconut
Oil Meal, Cane
Molasses, Salt,
Steamed Bone Meal,
Sodium Bicarbonate,
Iron Oxide, Copper
Sulphate, Potassium
Iodide.



DIST. OFFICE: MUNCY, PA.

Know what you are buying

A SUCCESSFUL manufacturer is as proud of the things he makes as you are of the things you raise. His reputation is bound up with his product. He keeps a constant watch over its making, to be sure that its standards are maintained, and he works unceasingly to improve it wherever improvement is possible.

When you read the advertisements in this journal, you are reading the sincere statements of men who believe in what they have for sale. They don't ask you to buy with your eyes shut. They would rather have you know the facts before you choose. When a man thinks enough of his product to put his brand name on it, he is willing to have it judged on its merits.

Many of these advertisers offer to send booklets and other descriptive material upon request. You will profit by asking for them and reading them with care. Make sure that the product advertised exactly fits your need. Then go ahead with confidence.

You can depend upon it that anything you see advertised in these columns will be as represented.

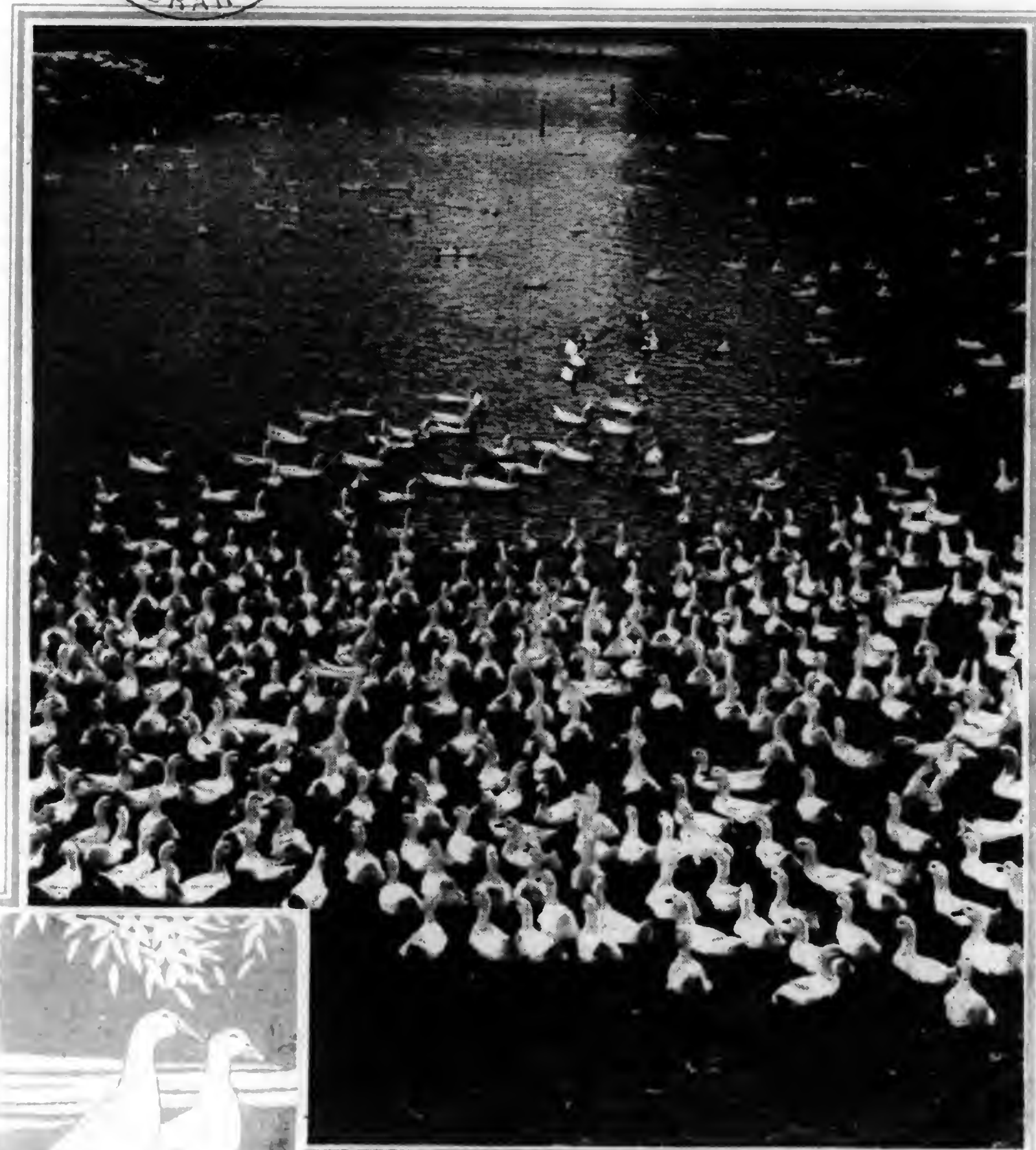
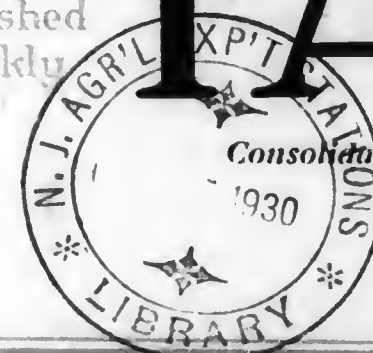
PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

October 25, 1930

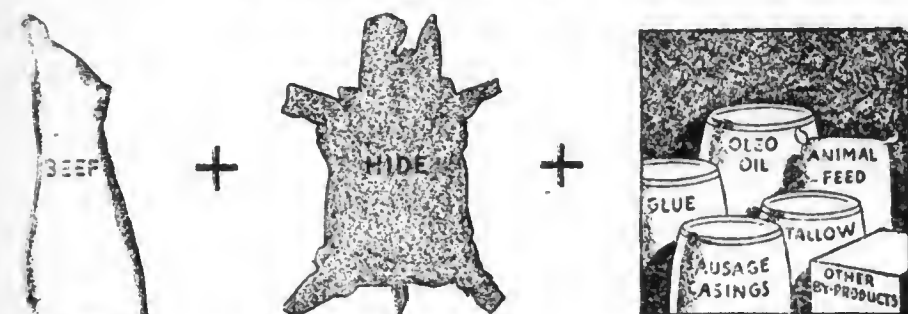


Philadelphia

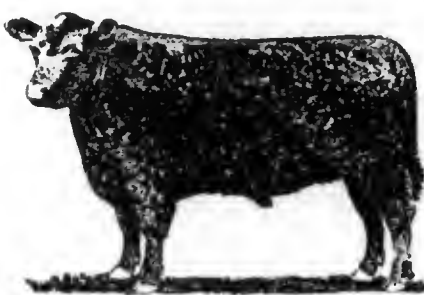
Pittsburgh

Harrisburg

The price that can be realized from



determines the market value of

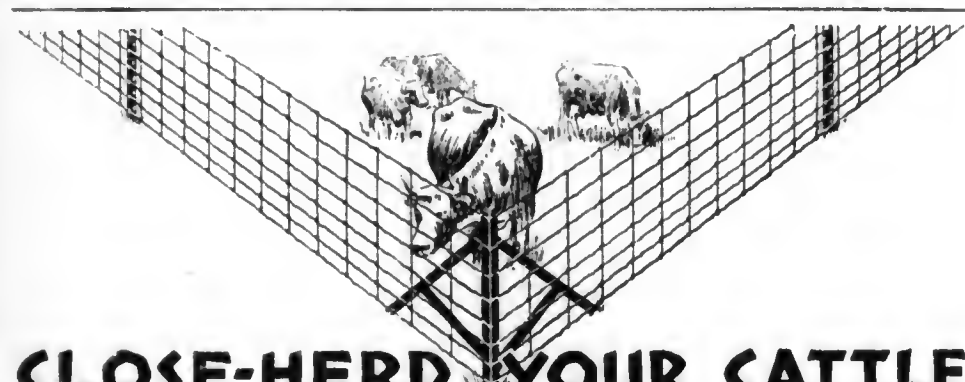


THE cattle buyers are "riding the yards." Before they left their offices they had reports on the beef, hide and other by-product markets. Swift cattle buyers receive hourly price reports on beef and by-products. Why?

Because the price of beef and by-products makes the price of cattle.

Most livestock producers recognize the economic fact that packers cannot stay in business if they pay more for live stock than they get for the meat and by-products.

Swift & Company, U. S. A.



CLOSE-HERD YOUR CATTLE WITH CAMBRIA FENCE

You can close-herd your cattle back of Cambria Fence without any danger that they will break through, or be molested. Cambria Fence forms a strong, durable barrier that readily turns cattle.

Cambria Fence is a woven-wire, hinge-joint, cut-stay, standard field fence. Full-gauge wire is used in its

manufacture. The wire has a heavy zinc coating that does not crack, flake or peel. The fence can be tightly stretched and still retain its shape because the Flexo Joint and Tension Curve give it resilience, strength and serviceability.

USE Bethlehem FENCE POSTS with CAMBRIA FENCE. Ask your dealer about Cambria Fence and Bethlehem Steel Fence Posts.

BETHLEHEM

BETHLEHEM STEEL COMPANY, General Offices: Bethlehem, Pa.



CONSUMERS MFG. & SUPPLY CO.
Dept. F., Mountville, W. Va.
SAY you saw the advertisement in Pennsylvania Farmer when you are writing to our advertisers



WANTED-Farm Products
Country, Eggs, Poultry, etc. Write for information.
GIBBS & BRO., 281 N. Front St., Phila., Pa. Dept. A.

Farm Facts and Fancies

By ALVA AGEE

YEARS ago so much was said about the soil's need of organic matter that some readers probably tired of the term, but the drought has brought many farmers a new realization of the soil's need. In the drought-stricken regions it was the soils with biggest organic content that kept plants growing. There was a better store of moisture. Nature made land that way, and all our science does not let us get away from it. Commercial fertilizers carry us through nicely when rainfall is normal, or more than normal, but when drought comes it is the water stored in soils rich in organic matter that is their dependence.

Nature's Wisdom

Man's control of land is very recent. Nature was making soils long before man was upon earth. In her dependable scheme was the use of decaying vegetation to free some mineral plant food and to make the land capable of holding a supply of water between rains. In these two ways soil building went along. We are partially free from the necessity of freeing inert plant food wherever crops can pay for the needed supply in the form of commercial fertilizers. The greater part of our farming land remains chiefly dependent on the nitrogen from the air and the available phosphoric acid and potash from the soil that organic matter so largely makes possible. In respect to holding moisture between rains and during prolonged drought our dependence on rotting vegetable matter remains about as great as it ever was. We are up against a fundamental law of nature that we never will repeal no matter how much science we may master.

Irrigation

There are instances of profitable irrigation of farms in humid regions, and if food prices were higher there would be far more, but among the certainties is the fact that the most of the food that will be grown in all our eastern and central states will continue to come from land that is not irrigated. Even where water is available at reasonable cost an investment in an irrigation plant for growing crops does not pay in a seasonable year. Organic matter, rotted and mixed through the soil in a long series of years, is the one dependence for most land in providing water day by day when intervals between rains are long.

Matured Vegetable Matter

There has not been enough emphasis put on the difference in value between pretty well matured roots and tops of plants and the watery stuff we get in green cover crops. Of course the latter have value, but the effect on physical condition of the soil is far less than in the case of old sods. The crop rotation in which a clover or good grass sod is turned down every three or four years came out of the experience of a host of farmers engaged in general farming. A cover crop in between helps and feeding on the farm and coating the sod with manure helps mightily. In such farming some mineral matter is supplied by the land, some nitrogen by the air, and above all in such a year as this, there is a physical condition that enables some water to be held for many weeks. In all our farm science the fundamental fact remains that good, rich organic matter is the life of the soil, and goes a long way in making it dependable.

Broadcasting Criticism

His appearance was deceptive if he really did some sound thinking that would justify him in wanting to be heard. He was pessimistic about business conditions—and right there he had fair footing—and the object of his ridicule was those national leaders who believe there is basis for in-

telligent courage and for faith that 1931 will see this country on its way back to normal industrial activity.

He knew that there had been longer delay than the government and leading business men had anticipated, and that gave room for hooting. He ignored the fact that half a dozen periods of depression had come to business in the last thirty years, and that recovery started nearly every time within a year and a half after the peak of the preceding period of activity. He ignored the fact that the slowing-down of factory production lets necessary demand gain on production, and always the result is the beginning of another period of activity that gives a job to every one who wants work. He simply liked criticism and valued his opportunity.

Within One's Rights

One can hardly say something of this sort without seeming to under-value the right of criticism. We should not get far without this right and its exercise. The only duty resting on one is that his criticism be intelligent and constructive. When things are not going well, it is natural to look around for some one to blame. I wish there were some way to keep all of us from becoming too optimistic at times, increasing facilities that lead to overproduction and compelling a halt that brings hard times, but why not blame the whole country for that? Maybe means will be devised some day for doing things more rationally, but we can at least bear in mind that after slowing down this country, always goes ahead. I am sure that legislation sometimes makes bad matters a good deal worse, and sometimes better, and here we have a right to decide opinions and to express them, but criticism that is intended only to be destructive delays the return of faith and of renewed business activity.

A Ten-Cent Dinner

I had gone into a restaurant for dinner, and an elderly woman came in and took a table nearby. She was carrying a sample-case, and later told the waitress that she was canvassing. She inquired carefully about the price, and finally ordered soup which would cost her ten cents, and would not take a regular dinner but asked about prices of some other things. Then she decided not to order more until she had eaten the soup, saying that the work did not justify her in ordering a great deal. Later she got a dime out of her purse, paid for what she had eaten, and left. One sees a good many of these pitiful turns to keep outgo down to income just now, and the thought that came to me was that I always have heard, and do know, that there is a good deal of hardship on the farm but there is no hunger. That woman canvassing for orders from door to door could have told us that it means a good deal always to have plenty to eat.

Notable Speakers

SPEAKERS of national reputation will appear on the program of the fifth annual Cooperative Conference at the Pennsylvania State College, November 20, 21 and 22. Charles Wilson, of the Federal Farm Board, will head the list. He will speak at the conference banquet on plans of the Farm Board for co-operatives in the northeastern states. Quentin Reynolds, general manager of the Eastern States Exchange and tell of the history, organization and aims of the Exchange. H. E. Babcock, general manager of the Grange League-Federation, commonly known as the G. L. F., will discuss the marketing plans of his organization. Lynn Hall, general manager of the Keystone Grange Exchange, will present the history, set-up and aims of the organization.

N O W

THE IMPROVED FORDSON TRACTOR

for \$75 less!

THE improved Fordson Tractor has been reduced in price from \$750 to \$675, f. o. b. port.

With its many improvements— $\frac{1}{3}$ more power, easy starting, larger air-washer, new cooling, lubrication and ignition systems and heavy-duty transmission—the Fordson at this low price represents a power unit of unusual value.

FORD MOTOR COMPANY



An Opportunity to Earn \$1,000 Cash BEFORE SPRING

Simply Showing Neighbors How to PREVENT FARM FIRES In Spare Time

Analyze now! Showers bring fire protection to the most isolated farms. This out fire 2 times faster than water. Can be used by women or children. One quart of insulating fluid turns into 500 quarts of dense vapor that kills fire as it by itself. State Fire Marshals and insurance companies praise and recommend this marvelous device which already has saved hundreds of lives and millions of dollars worth of property from destruction by fire. The U. S. Government, alone, has bought 250,000 of these devices. Many of the nation's fire departments, cities, homes, railroads, ferries, hotels, etc., have chosen this device to protect lives and property.

\$300 TO \$500 A MONTH

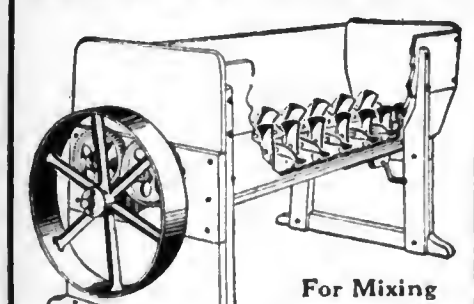
Now a huge Ohio corporation joins the nationwide fight against farm fires by appointing men in local territories to sell neighbors how to protect their property and the lives of their loved ones from the terrible danger of fire. Easy, pleasant work. Can be handled in spare time or full time. W.M. Swisher, its state agent for full time, averages \$100 to \$200 a month. Part time agents average \$50 to \$100 a month. Many full time workers earn up to \$500 a month and more a month. A Month's See, Ohio, made \$5,000 first year, \$10,000 his second year. L. H. Payne, Iowa, averaged over \$500 a month.

NO EXPERIENCE OR CAPITAL NEEDED

This is a steady, permanent position for men we appoint now. Big year-round income absolutely assured for right men who will devote their time to the work. No experience needed—you don't have to be a "smooth talker." Simply show the device as we tell you how. We furnish everything. Big working outfit and demonstration kit loaned to you. Frequent everywhere. Farms, stores, garages, filling stations, automobiles, warehouses, schools, etc. See how others have started fortunes—how easily you can have \$1,000 EXTRA cash before Spring. Write at once before some other person in your territory gets this marvelous money-making opportunity.

THE FYR-FYTER COMPANY
75-54 Fyr-Fyter Bldg., Dayton, Ohio

No. 22 DELLINGER BATCH MIXER



For Mixing Ground Grain, Ground Roughage with or without Molasses for Dairy Feed.

Write for catalogue.

A. M. DELLINGER, Lancaster, Pa.

EDWARDS METAL ROOFS

Greatest Values—Lowest Prices

DURABLE Roof your house or barn with Edwards Metal Roofing, and you'll have a roof that will last for years. It's made of pure steel, painted or galvanized, or Edwards famous rust-resisting, copper-bearing steel.

BEAUTIFUL Beautiful styles for every purpose. Colonial, Dutch, Spanish (tile). Shingles (imitation), corrugated, or standard (seam).

ECONOMICAL We roll our steel, make our roofs and sell direct to you at amazingly low factory prices. Thousands of farmers have found Edwards Metal Roofing the permanent solution to the roofing problem. You will too. Write for free samples, prices and Roofing Book No. 1301.

The Edwards Manufacturing Company
10341-10391 Butler St. Cincinnati, Ohio

Horse limping? Reach for ABSORBINE

For 38 years Absorbine has relieved hard-worked muscles and tendons—a quick help to reduce strains, swellings. Promptly eases injuries, never blisters, loosens hair or causes lay-ups. A great antiseptic for aiding quick healing of cuts, bruises, sores. Any druggist—\$2.50 a bottle. W. F. Young, Inc., 354 Lyman St., Springfield, Mass.

When writing advertisers please mention Pennsylvania Farmer.

NESHAMINY GARDENS

By R. P. KESTER

I OFTEN wonder whether Pennsylvanians fully appreciate the beauty and wonderful coloring of the trees and forests in autumn. This annual art exhibit is worthy of intelligent and sympathetic attention. People pay admission to see man-made products that are but poor imitations of what nature can do in the way of combining shades and colors. But because it is the work of nature, and because it is an annual affair, we sometimes allow it to pass as a commonplace.

The ability to see the beauties and wonders around us helps to soften the hard places in life's pathway, but it is an ability that must be fostered by close attention. It is worth while to stop in the hurry of business and calmly drink in the inspiring beauty about us. Such a practice makes for peace, contentment and long life.

Science has taken much of the mystery out of nature's methods of work. The poetic conception that God touches the leaves of the trees and the petals of the flowers with his brush producing an inimitable display of beauty is a fine thing. Yet it does not detract from that beauty to know just how the transformation takes place.

It used to be thought that frost was the cause of the coloring of the leaves, where as a matter of fact hard frost prevents the development of the most beautiful colors. A hard freeze while the leaves of the trees are still green and full of sap arrests the proper ripening process and the leaves turn dark.

With the shortening of the days and the cooling of the atmosphere the machinery for food production in the leaf is subjected to more and more adverse conditions. Soon these little factories (the leaves) cease to function as they did in long days and warm weather, and the plant food in them is withdrawn into the twigs and branches. Complex phosphorus, nitrogen and potassium compounds are broken up into simple forms, all in solution, and withdrawn from the leaf. Usually this translocation of food materials takes place at night, because certain light rays prevent the conversion of starch to sugar.

But when the nights become too cool for this conversion a red coloring matter is formed in the leaves which acts as a screen, preventing the harmful rays of light from entering the leaf. Moreover, the red color absorbs the heat rays and raises the temperature somewhat so that the ordinary processes can go on. The green substance of the leaf is no longer needed at this time and it is withdrawn, leaving the yellow substance.

This is a very brief and incomplete description of the chemical process which goes on when the days shorten and the nights cool off, and tells what the chemists have discovered about the Fall Colors.

But, like a lot of other things, we may know the superficial fact yet not understand it. But, also like many other things, it is not necessary to fully understand a thing in order to appreciate it or use it. We talk glibly about electricity, yet the wisest men know little about it, although knowing how to produce it, how to control it and how to use it.

The canning and soup-making factories in the East make a big outfit for tomatoes and other garden products. The production of these crops

is carried on on a big scale in many sections. The past decade has almost revolutionized market gardening as well as housekeeping. While there is still a good demand for fresh vegetables during their growing season, their production has been more than doubled because of the modern canning industry. The head of the biggest soup-making company in America died recently, leaving a fortune estimated at \$150,000,000—all made in the soup business.

This man was a trained chemist and he used his acumen and scientific knowledge in the direction of food preparation in such a way as to revolutionize the business, and at the same time benefit humanity while enriching himself. The story is told that his father was not pleased at the beginning. His comments are reported as follows:

"I have spent thousands of dollars educating that boy and training him as a scientist. Now, look at him! He is making no better use of it than in making tomato soup!"

I do not know whether or not the father is living, but if he is I have no doubt he has revised his original judgment.

Friendly Talks

By Edgar L. Vincent

"DON'T look at me; look at the sheep."

I was only a boy then. My father had sold some sheep, and we were driving them up the road on foot, toward their new home. The buyer had something about him which had an attraction to me, and I kept turning my eyes his way, leaving him and my father to take care that the sheep did not dodge into some gateway. Then the man called out to me, "Don't look at me; look at the sheep!"

I never have forgotten those words, and I have learned that more folks than boys are inclined to watch something besides their own job, and often to their sorrow. I have seen farmers who paid a great deal of attention to the comings and goings of their neighbors, so that they did not have the time to bestow on their own farm work which was really needed to bring them success. Not only that, sometimes we let other men do our thinking for us.

Thinking for One's Own Self

It is all right to be interested in the methods other farmers adopt, but it may be a mistake to adopt those same methods ourselves. Because some one sets out a Ben Davis apple tree, that is no sign that it would be a good tree for us to plant. You and I may have saved up money enough to pay for a good tractor, but Tom might have to run in debt for one if he tried to follow our example.

Then, too, watching other folks, we may let our flock of sheep slip through a pair of bars and run all over a neighbor's crops. It would be a hard job to corral them and get them back into the road. The summing up of this story is, then, keep your eyes on your job. Be ready to make the other fellow's ideas your own if you are sure they are better than yours. Do your own thinking and "watch the sheep" till they are past the barway.



Reg. U. S. Pat. Off.

Brown's Beach Jacket

Byrd's and MacMillan's Expeditions were both equipped with them. MacMillan has said, "We can't get along without them." Made for rough-and-ready outdoor service, of strong knit cloth with a warm knit-in wool fleece lining. Will not rip, ravel or tear; can be washed and keeps its shape. Three styles—coat with or without collar, and vest.

Ask your dealer
BROWN'S BEACH JACKET COMPANY
Worcester, Massachusetts



HOUSE LIGHTING

Use National Carbide for house lighting. Better quality. Lower cost. Improves generator operation. Ask your dealer for National in the RED DRUM. Write us if he cannot supply you.

NATIONAL CARBIDE SALES CORP.
Lincoln Building New York, N.Y.

NATIONAL CARBIDE

10% CUT
FROM CATALOGUE PRICES
FOR SHORT TIME ONLY

Complete for 6-Room House
WAS \$175 NOW \$157.50



INCLUDING 6 radiators, large steam boiler, pipe fittings, valves, and asbestos cement. We pay the freight.
Write for FREE Catalog 90
J. M. SEIDENBERG CO., Inc.
254 West 34th Street, New York

KILLS RATS NOTHING ELSE

K-R-O (Kills Rats Only) killed 238 rats in 12 hours on a Kansas farm. It is the original product made by a special process of squill, an ingredient recommended by U. S. Government as sure death to rats and mice, but harmless to dogs, cats, poultry or even baby chicks. You can depend on this. K-R-O in a few years has become America's leading rat and mouse killer. Sold by all druggists on a money back guarantee.

Read the Advertisements

they help you get the most out of life and save you time and trouble doing it.

MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

PENNSYLVANIA FARMER

Published Weekly
Consolidated with
PENNSYLVANIA STOCKMAN and FARMER
Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of March 3, 1879.

President - - - Arthur Capper
Vice-President - - T. D. Harman
Vice-President - George M. Slocum
Editor-in-Chief - - E. S. Bayard
Manager - - - Neff Laing

New York - - - 420 Lexington Ave.
Chicago - - - 203 No. Wabash Ave.
Detroit - - - 1632 W. Lafayette Blvd.
Philadelphia - - 1201 Chestnut St.
Cleveland - - - 1011 Rockwell Ave.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., October 25, 1930

No. 17

The Evolution of Marketing.

By V. ROSS NICODEMUS

THE evolution of marketing farm produce, in general, may be depicted by reciting the manner of marketing the farm produce of any particular farm during the past twenty-five years. Of course in the early Colonial days the only way that settlers had to get their produce to market was by driving it on foot. What could not be driven on foot would have to be carried on the arm in a basket, on horse-back, by wagon or by one-horse shay. The eastern farmer then as now was comparatively near to the markets and could readily sell or barter what surplus produce he had for the simple groceries such as sugar, coffee, etc., that was then a part of the commodities of trade.

When the livestock industry of the Ohio valley was developed thousands of head of steers were driven over the Allegheny mountains to the cities of New York and Philadelphia to feed the rapidly increasing population. After the advent of the railroads and the opening of the Erie Canal this livestock and other produce of the Ohio valley was transported by rail and barge, but the eastern farmer because of the short hauls got his produce to market by means of horse and wagon. The railroads and the canals went after the long hauls.

Because of the short hauls to the eastern markets there grew up in the eastern states many people who made a livelihood by making regular weekly trips over well-established routes to the farms where they gathered the butter, eggs, live poultry, dressed hogs, veal calves, and in the fall of the year the apples and potatoes, that the farmers might have to sell. I can well remember, when I was a boy, how our work during the week centered around the problem of how much butter, eggs, apples, potatoes, etc., we would have to sell to the huckster when he made his weekly visit.

Huckster Forced Out

In those days we were without any means of communication with the cities and were very much out of touch with the demands of the markets and the prices that the huckster got for our produce. There were no rural mail delivery, hence no daily paper, no telephone, no radio, and since the only means of transportation was either by foot or with horse and buggy the trips to the city were infrequent and at irregular intervals. Besides the produce that was sold to the huckster, butter and eggs were taken to the local grocer where they were exchanged for groceries and other needs of the home.

The writer can well remember when as a boy he carried a basket of butter and eggs two miles to the nearest town and exchanged them for things that were needed in the home. I can almost feel my arms ache now as I think of it. However, the trip seemed shorter, for the basket was much lighter and always in order to buy out the entire value of the produce the store list included some candy which disappeared with each long mile on the return trip.

About fifteen years ago when we bought our first automobile we thought it was so nice that we never would haul anything in it. It was not long, however, until we found that by making regular weekly trips to the city markets we could

take the butter and eggs along in the back seat of the touring car. The additional income that we received for our produce over that which we received from the huckster paid for the expense of the trip to town and we had a little left.

As more farmers were able to own automobiles and take their produce to the city market the routes of the hucksters were cut up so much that it did not pay them to come around. Also, about this time the creamery was developed and the farmer received more for the products of the dairy in the form of fluid milk than he could get by making butter; and since butter and eggs were the chief money-making commodities handled by the huckster he was soon forced off the road.

At first we hauled only such things as butter and eggs to market in the touring car, because the car was primarily a pleasure vehicle. But a basket of eggs or a few rolls of butter could be hauled very readily in the car without much inconvenience. As the first car became worn somewhat another was bought and the old car retained and

sell them live weight. There was much discussion and figuring done as to which was the most profitable way to sell, alive or dressed. But, since we were unable to reach the packer direct we persisted in selling them dressed until we were able to get a truck of ton capacity. Only one load of live hogs did my father and I ever take to the packing house by horse and wagon. It was a twenty-mile drive and consumed a whole long day from before sun-up till after dark.

When potato growing became profitable and we had more than a thousand bushels of potatoes to market it became necessary to get a truck for the purpose. Of course there were a number of large truck growers who would haul as many as one hundred and fifty bushels of potatoes at one load, and they would do it, and will today, do it cheaper than one can haul them himself by a lighter truck. But to do this it is necessary to find a groceryman who can handle a load of that size or go to the wholesaler. In either case one would have to take a less price than one would who had his own truck and could keep in touch with the market every week. So it was not long until a crop of potatoes was invested in a truck and the potato acreage increased so as to keep the truck busy throughout the winter. During the last four years we have averaged more than thirty trips to the city with this truck. In addition we haul all of our coal for winter direct from the mines besides much other hauling that needs to be done on the farm.

Breaking Clouds

THERE is of late a conservative note in the views of some farm-minded optimists. They tell us that we may no longer expect fortunes to be gained through the increase in the value of farm land. They expect the man-gained facilities for the production of food to offset the population gains, and claim that there is no danger of the theory of Malthus working out for some centuries.

But are we aware that there exists a more hopeful tone in the agricultural future? That skilled application of modern methods on land maintaining a general, although low, average of value will reward the owner-operator. We still have with us the unpleasant aftermath of the greatest speculative orgy agriculture has known. None of us hopes to see it repeated.

However, the present trend of the still existing depression makes it possible for younger farmers to own their homes. So what if the general average value of farm land is low? It should be in keeping with the prices of farm products. A readjustment to a new scale of values works no hardship if we are thereby enabled to determine and maintain a profitable production.

Excessive taxation in some districts can easily be overcome by accepting these levies as part of the initial investment, automatically and ultimately lands assessed at too high a value will sell for less than the same soils with lower assessments. Investment capital will be found seeking an outlet in farm lands at productive values; and a brighter future is clearing for farming. S. H. Green.



This farmer has "evolved" a satisfactory transportation unit by the use of a wagon and rubber wheels on a tractor.

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

EDITORIAL STAFF
T. D. HARMAN, Vice-President
C. L. WHITE, Editor
MILES HOIST, Field Editor

Editorial Office: PITTSBURGH, HARRISBURG, PHILADELPHIA
Contributing Editors: R. P. Keiser, Alva Ames, L. W. Lighty, W. D. Zinn,
H. J. Hushman, J. I. Shuler, F. L. Bentley, J. C. Ligon,
S. W. Fletcher, H. C. Knandel, A. A. Bivland,
R. L. Scharring-Hansen, Gilbert S. Watts,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR.
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each insertion.
Minimum space 5 lines. Special rates on application for
classified advertising. No deceptive, immoral or
swindling advertisement inserted at any price.

Member Agricultural Publishers' Association,
Audit Bureau of Circulations.

Volume 103, No. 17

Established 1877

COST OF HOLDING

WE don't know what it costs the two stabilization corporations to carry their accumulation of wheat and cotton. It is said that the carrying charges on the wheat are about \$600,000 per month and on the cotton a little more than that. But these are only the visible costs. There are others which cannot be computed, such as the weight of these big piles of commodities on the market and the uncertainties attending their future disposal. The official report, which is due early the coming winter, may give us the visible costs, but it cannot compass the others.

TWO SURVIVORS

A FRIEND sends us a clipping from the Chestertown, Md., Transcript which gives a brief account of a bull's attack on Mr. Samuel Emory. The bull knocked him down and inflicted painful but not serious injuries. He was saved by a colored boy, who succeeded in diverting the bull while Mr. Emory crawled away. The name of this boy, the name of every one who strives to rescue the victim of an enraged bull, deserves honorable mention. Our correspondent says: "I went through the same ordeal eight years ago. Please publish as a public warning."

THE PRICE OF A SIRE

WE have a letter from a man who wants a beef-bred bull but says breeders haven't heard of the crash in the stock market or the drouth or the slump in cattle, for they ask \$750 for a pure-bred bull calf six months old. There are several reasons why the breeder of beef cattle should not be expected to sell a bull six months old or over for a low price. That bull's potential value as a steer is one of them. Another is that the calf is all the return the breeder of beef cattle gets from his pure-bred cow, and if he is to continue in business he must get enough to maintain the cow. At the price this reader names the bull will command more than its cost when no longer needed for breeding. Blood at the cost of keeping it appears to be about as cheap as anything else on earth, considering its value.

A SUGGESTION

SECRETARY of Labor James J. Davis says that every year about 2,000,000 boys and girls come of work age; that every year a quarter of a million workers come from the country to the cities, and about a quarter of a million come into the country as immigrants. Also that since the beginning of the

great war 6,000,000 women have gone to work in our industries. He makes no estimate of the number of workers whose places have been taken by machines but it must be large. Such facts may help us to account for the present surplus of labor even if they don't suggest a remedy for it. As in all other periods of change and development time is necessary for readjustment. During this time it may be possible for some deferred improvements to be made on farms, some things which the scarcity and high cost of labor and materials have caused to be postponed. It is true that many farmers are not in position to make improvements now but some are, and to these only this suggestion is in order.

TWO BIG SHOWS

AFTER 24 years of wandering the National Dairy Exposition promises to become a fixture in Missouri. Its new home, second to none of its kind in the world, is adequate in size and convenient in arrangement, while the progress in the dairy industry during the past quarter of a century justifies such a show as the one staged at St. Louis last week.

The next nation-wide show is the International Livestock Exposition, which will be held at Chicago, November 29 to December 6, when horsemen and sheep, swine and beef cattle breeders will compete for the highest honors to be obtained in their respective breeds.

CHEAP MUTTON

SHEEP are cheap and so is mutton, the wholesome meat of sheep. At current prices good mutton carcasses can be sold at 10c per pound or less, the cheapest meat on the hooks. But consumers don't want it and will not buy it, no matter how little it costs or how much they need low-priced meat. They prefer lamb at double the price, and that preference is becoming more emphatic all the time. Under the circumstances the thing for sheepmen to do is quit producing mutton so far as that is possible. The ewes which raise the lambs consumers want must find an outlet some time, and they will amply supply the waning trade in mutton. Those who have been raising and keeping wethers might well consider a change in their management whereby these may be marketed as lambs. Probably the best plan is to grow and finish them well and sell after securing the first and only fleece. The modern Merino lamb is a producer of popular meat but the wether is not, and we might as well recognize this evident fact first as last.

A PASTURE CONFERENCE

AT New York last week farmers, agronomists, representatives of the fertilizer industry and agricultural editors participated in a conference on the improvement of pastures. The discussion was mainly but not entirely about the results obtained by dairymen in fertilizing pastures and so relieving themselves of a part of the cost of grain feeding. Reports of a large number of tests on farms were presented, with results ranging from favorable to highly favorable, and five farmers appeared in person to give their experience.

This experience was interesting because these practical men figured out in dollars what improved pasture was worth to them. It was worth more to some than to others because of differences in the amount and cost of grain saved, differences in value of the product of pasture and other variations; but a heavy application of a complete fertilizer to good grass land was a good investment for all of them. They all told essentially the same story, the difference being only in the amount of profit from better pasture. All re-

ported a longer grazing period, saving of high-priced grain, better condition of cattle and improvement in pastures as results of liberal applications of plant food. In the future we shall have more definite knowledge on this subject than in the past. For the crop which costs nothing to seed, cultivate and harvest will get the increased attention and appreciation it deserves.

VITAMIN "G" IN MEAT

VITAMIN sleuths, having weighed the vegetable kingdom and found most food plants not wanting in the mysterious substances which promote various attributes of happiness, have got around to meat. Upon consulting rats they learn that lean beef, pork and lamb provide enough vitamin G for excellent growth if they comprise 15 to 25 percent of the ration, and that beef and pork liver and beef kidney are three to eight times as potent. We have long suspected that most wholesome foods were good for folks, and if this vitamin evidence continues to accumulate we shall not be afraid to eat anything that has sustained men since they quit dining on each other.

AN EXAMPLE

FOR years believers in public ownership of utilities and other government dabbling in business have held up Australia as an example of a prosperous and "progressive" commonwealth. But things have changed in recent months. Australian credit has gone down and is now below that of any other British dominion. Public debt has increased and it is difficult for the country to meet its current obligations. Unemployment has increased also to such an extent that "Australian workers as a body effectively receive little more than in 1911," although the wage scale has more than doubled. The financial expert who has been surveying the situation says: "Australia is off budget equilibrium, off exchange equilibrium, and faced by a considerable unfunded and maturing debt, both internally and externally; in addition to which she has on her hands a very large program of loan works for which no financial provision has been made." And Australia is not the only country which has departed from that sound principle or policy whereby government attends to the proper functions of government while business attends to business.

A CHANCE TO THINK

ALL those things which make people think may prove to be beneficial in the end though not a bit pleasant at the time. Take this case for example: It is getting harder and harder to pay taxes on real estate, for it bears too great a share of the tax burden. Since the heaviest tax burden is local rather than state or national, let us think about two or three things which are connected with it. Take any man who owns a farm and also draws a salary and compare what the farm pays in taxes with what the salary pays. Or take two men and make the same kind of a comparison. That should lead to some thinking about the inequalities of taxation. Or consider the present local unit of units of government and taxation, based on a system in use centuries ago. Is that plan of system economical or extravagant under modern conditions? How can it be revised so that it will cost the taxpayer less? It might be well to ask also what revenues now going into the state treasury should be divided with the counties or local units. Why a state with ample revenues and counties and other local units in poverty? These are not all the things that might be mentioned, but they are enough to justify some real hard thinking.

New Jersey Farm Comment

By G. W. HARRIS

Leming, Mercer county, placed first in the junior contest. He was followed by Carl Van Lier, Cumberland county, and Charles Davison of Middlesex county.

ON Thursday, October 9th, the fourth annual Kent county (Maryland) turkey tour was held under ideal weather conditions. Turkey growers from five states, to the number of two hundred, visited the three largest flocks in Kent county, J. W. Biggers' flock of 1,300 Bronze and White Holland near Millington, Albert Jervis' flock of 2,600 Bronze at Still Pond, and Bakers' Turkey Farm near Chestertown, where 1,800 beauties were seen.

Following the farm visits the tourists went to the Washington College where a demonstration of grading dressed birds, according to U. S. government standards, was conducted by W. H. Rice, extension poultry specialist of the University of

affected the crops. The weather during May, June and July was ideal for grain crops and on this account the yields per acre of winter wheat, rye, oats and barley were above the average.

"The main crop of white potatoes had reached maturity before the dry weather set in. This season has been an exceptional one. Growing conditions at the critical stage during June and the forepart of July were extremely favorable. Sufficient moisture accompanied by high temperatures during the day with cool nights are responsible for the highest yield ever obtained in New Jersey. There also has been an almost total absence of plant disease and insect damage this season. The yield of the late crop of potatoes or that portion which is harvested after September 1 is considerably below the main crop or that portion which is harvested before September 1. Combining the yields of the main and late crops and using the October 1 condition, we have an average yield

of 190 bushels per acre and an estimated total production of 9,690,000 bushels, as compared with 6,032,000 bushels harvested in 1929 and 8,225,000 bushels, the average production for the five-year period, 1924-1928.

"The total production of apples this season is above average, being estimated at 3,713,000 bushels, as compared with 1,880,000 bushels harvested in 1929 and 2,234,000 bushels, the average production for the five-year period, 1924-1928. The short peach crop is due to the severe frost in February, when the swelling buds were killed.

"The weather during the second half of July and first half of August was not favorable for truck crops and field corn which were at that time in process of ripening. With practically no rainfall continued from July 14 to August 15. This period of high temperature and lack of precipitation acted unfavorably, causing a decline on the condition of vegetables, field corn, late cuttings of clover, alfalfa and pasture from 5 to 25 per cent.

"Taken as a whole this season was favorable as far as yields are concerned to the farmers growing grain crops, white potatoes and apples, and unfavorable to the dairymen and peach growers. The season was an average one for vegetable growers."

MILK marketing problems are to come up for discussion at New Brunswick on October 30, the third day of the farm marketing institute of the New Jersey Agricultural Experiment Station.

Prof. J. W. Bartlett, dairy husbandman for the agricultural experiment station, will discuss marketing problems of the dairy industry in New Jersey. Prof. Charles E. Howe of the economic division, Federal Farm Board, will follow with a report on the survey of milk marketing conditions in north Jersey. L. H. Bean of the Bureau of Agricultural Economics, U. S. Department of Agriculture, is listed to talk on "The Effect of Business on Agriculture." Charles D. Cleveland of Eatontown, president of the State Dairy Committee, will discuss the activities of that body.

The first speaker on the afternoon program will be Frank E. Oliver of Upper Montclair, who will discuss the dealer-producer viewpoint in marketing. Fred Shangle, vice-president Interstate Milk Producers' Association, will talk on "Maintaining a Satisfactory Milk Market." Fred H. Sexauer, president of the Dairymen's League, Incorporated, New York, will give the final talk of the afternoon program. His subject is, "Service to Membership and Its Relationship to the City Markets." A general discussion will follow.

The first and second days of the institute will be devoted to the marketing of fruits and vegetables, and poultry and eggs respectively. The final day's program, in which members of the New Jersey State Feed Dealers' Association will participate, will deal with business methods of purchasing and selling farm supplies.



A truck and a tractor make an efficient combination in shredding corn stover.

Maryland. Head wrapping to improve the appearance was demonstrated. Sample patterns were distributed. An exhibition of canned turkey was made by Helen N. Schellinger, Kent county home demonstration agent. Directions for canning turkey were distributed, also tentative specifications for U. S. standards and grades. Mr. Rice demonstrated, with live birds, how to select the birds ready for market—urging the retention of the thin, pin-feathered birds until they reach market condition, rather than selling them with the prime birds. The importance of attractive packing was stressed.

The visitors expressed themselves as much pleased with the new ideas noted and imparted and called the tour a complete success.

The details of the tour, as in former years, were in the hands of County Agent J. D. McVean. Mr. McVean expressed himself as being "gratified," but regretted that time permitted visits to so few of the many excellent flocks.

THE October 1 crop report from the New Jersey Department of Agriculture would lead us to believe that the severe drouth this summer and the dry period in September had seriously affected few farmers in the state except the dairymen and the producers of second-crop potatoes. The dairymen comprise a large group of farmers in New Jersey, but the acreage of late potatoes is small.

Following the many newspaper reports this summer concerning thousands of dollars lost by New Jersey farmers due to the prolonged drouth, it is interesting to note in the October crop report for the state that the production of most fruits, grains and vegetables is as great or greater than in 1929 and compared favorably with the five-year average.

"The time has come when New Jersey farmers after the strenuous season may make up their balance sheets for the 1930 crop year," says the report.

"The dairy farmers were hit hard. The drouth during the summer caused very poor pasture and hay. The total production of all tame hay this year is estimated at 356,000 tons, as compared with 437,000 tons, the average production for the five-year period, 1924-1928. This means that the New

THE \$30,000 Frelinghuysen Fund, a loan fund available to boys and girls in New Jersey for purchase of pure-bred stock, was placed last year under the direction of a corporation composed of members of the State Board of Agriculture. The fund will be known in the future as the New Jersey Junior Breeders' Fund, Inc.

In 1921 Joseph S. Frelinghuysen, former president of the State Board of Agriculture for 17 years, and Julius Forstmann, of Passaic, donated \$30,000 to encourage young farmers to raise better livestock. During the past nine years the fund was administered through the Department of Agriculture in cooperation with the extension staff of the Agricultural College.

The Frelinghuysen Fund, as it has been known in the past, has done much to stimulate Four-H club work in the state. Many boys and girls made their first purchases of club animals through this fund, and from that built up outstanding club herds. Former Senator Frelinghuysen wished to see New Jersey agriculture. To do this he realized it could be accomplished most profitably by assisting and encouraging boys and girls on farms to raise better livestock. Since the fund was established in 1921, 1,018 loans totaling \$717 have been made to boys and girls buying pure-bred cattle, hogs and poultry. It is safe to predict that out of these loans have resulted in breeding of better and more profitable herds and flocks, not only on the particular farms, but also in the communities.

Each request for a loan is investigated with regard to the boy or girl and the desired purchase. A person wishing to purchase a pure-bred animal may borrow up to \$100 from the fund, and as the loans are repaid, money is put to use through new loans.

The New Jersey Junior Breeders' Fund, Inc., helps to establish the credit of these young farmers, as well as making possible their first start in business. Credit is of importance in farming today. That which is established by making use of this fund is probably of greater value than the initial start in farming.

Trustees of the new corporation, all members of the State Board of Agriculture, are: Elmer H. Wene, Vice-President; William B. Duryee; H. Norman Hancoc's Bridge; Joseph W. Miller, Princeton; and Clifford E. Snyder, Pittstown.

THE American Royal Livestock Show held in Kansas City the third week of each November has become the center of national activity for Four-H Clubs and vocational agricultural schools. Last year nearly 3,000 boys and girls from 30 states attended the show.

This year will be held the Eighth Annual Royal Livestock Show of Four-H Club boys and girls, the 10th Annual National Congress of Vocational Agricultural High School students and the Third Annual Convention of the Future Farmers of America. Few New Jersey farmers are interested in the American Royal, as it is primarily a fat cat and horse show in a livestock country. But it has become the center of national junior activity it has become of interest to every Four-H Club and vocational boy in the state. To name a delegate from New Jersey to the American Royal is one reward for work well done.

NEW JERSEY Four-H Club members held their annual state-wide dairy cattle judging contest on October 4 at Forsgate Farms and Coventry Farms from Cumberland, Gloucester, Mercer, Middlesex, Monmouth, Salem, Sussex and Warren counties competed in both the senior and junior contests, while a junior team representing Morris county, a total of 57 club members, including the alternates, participated in the contest. Salem county led the senior teams, followed by Sussex and Monmouth counties, while Morris and Cumberland counties tied for first place in the junior contest with Mercer county second and Warren county third. The high scoring Salem county senior team was comprised of Belford Moore, J. Pettit Jr., and Edward Crispin. The boys tied for junior honors were Carl Van Lier, Robert Mixer and Henry Renne on the Cumberland county team, and Harold Burnette, Robert Meyer and Ernest Pickle on the Morris county team.

High scoring individuals in the senior contest were James J. Pettit, Jr., Salem county, first; Ross Simmons, Sussex county, second; and Marjory Parry, Monmouth county, third. Warren

John Imberlay, Trustee

By Homer Green

Copyright, 1903, by Perry Mason Company.
Boston, Mass.

THE president and executive officer of the Citizens' Bank of Briery looked worried. He was seated in the president's room at the bank, comparing certain statements which had been handed to him by one of the clerks. There was a mistake in the record of the day's business; the cash would not balance.

The discrepancy was less than a dollar, but it had been a rule of the bank for thirty years that the cash should equal the balance shown by the books, to a cent, at the close of business each day. The clerical force still retained a vivid recollection of a certain occasion, less than a year back, when the president kept them at the bank for two nights in succession to ferret out an apparent discrepancy of forty-three cents. Therefore, since it was nearly closing time, and since it was a particularly fine June day, the young men were working with a will to find and correct the error that some one had made.

It was not wholly the want of accuracy in the accounts, however, that caused the look of anxiety on John Imberlay's face. Nor was it the recent break in the market, a break that had sent the prices of stocks tumbling to an alarming level, with bonds following closely at their heels. For the stability of the Citizens' Bank was not dependent on the fluctuations in the market values of securities, no matter to what extreme the pendulum might swing. It was recognized everywhere as one of the soundest and most prosperous, as well as one of the most conservative financial institutions in that part of the state. To hold a block of its stock, and to participate in its handsome semi-annual dividends, was considered a mark not only of respectability, but of prosperity as well.

And no one ever denied that the great success and the high standing of the bank were due, for the most part, to the tireless energy, the strict integrity, the sound business methods and good judgment of its president, John Imberlay. Yet he had none of the elements of popularity. He had never been "hail fellow well met" with any one. He was dignified and reserved in manner, coolly precise in all business transactions; he never asked favors, he seldom granted them. Yet he had the respect and the goodwill of the entire community.

Doubtless one cause of the president's anxiety on this particular afternoon was the fact that the receiving teller was about to leave the employment of the bank to take a more responsible and a more lucrative position in a larger city. Thus Stewart, the head bookkeeper, was in the line of promotion; and although there could be no question as to Stewart's remarkable quickness and accuracy in figures, his qualifications for window service, a position which brought him into direct and continuous contact with the customers of the bank, were yet to be tested.

Moreover, the president had before him, on his desk, a set of account-books labeled "John Imberlay, Trustee." And the employees of the bank had often noticed and remarked upon the fact that whenever he examined these books the troubled look came into his face. No one knew why.

INDEED, no one could give any explanation of the trust under which John Imberlay was acting as trustee. All that was known was that there was a large trust fund, that it was kept invested in a variety of securities, and that the books containing the records and accounts of the transactions, as well as the bank account standing in the name of the trustee, were kept with the most scrupulous care. The creation and conditions of the trust, and the name or names of the beneficiaries under it, were matters of which John Imberlay alone appeared to have any knowledge. The president's examination of the statement he held in his hands was interrupted by the entrance of a clerk.

"Mrs. Leighton and her son of Broad Valley are here, and would like to see you, sir," the clerk said.

Mr. Imberlay did not look up from the paper he was studying. "Say that I'm too busy to see any one this afternoon," he replied.

"Very well, sir."

But before the clerk was fairly through the doorway the president called him back.

"One moment, William. Who do you say it is that wants to see me?"

"Mrs. Leighton, sir, of Broad Valley."

"Is she the widow of George Leighton, who recently died?"

"Yes, sir."

"And the trust holds a mortgage against the place?"

"Yes, sir, she's the one. I know them very well. I belong over in that country, you know."

"Well, show them in. I'll see what they want."

Mr. Imberlay laid his paper on the desk, remov-

ed his eye-glasses, and leaned wearily back in his chair. A moment later Mrs. Leighton, accompanied by her son Robert, entered the room. She was not an old woman, but tall, anxiety and sorrow had bent her shoulders, furrowed her face and saddened her eyes. As for the boy, he was sixteen years old and a cripple. His right foot hung limp and almost helpless, and he walked heavily with the aid of a cane. In other respects he was well-formed and robust, and his face showed marked intelligence and manliness. Both mother and son felt awkward and ill at ease in the presence of the banker, and there was no effort on his part to relieve them in any way of their embarrassment.

Finally Mrs. Leighton managed to state the object of their visit. "We have come," she said, "to see about the mortgage. You know Mr. Leighton is dead."

"So I have heard," replied the banker, without the slightest change of expression on his face.

"And," continued Mrs. Leighton, after a pause, "the interest on the mortgage has now been due for a long time."

"Yes, for more than a year."

"Well, Mr. Leighton couldn't pay anything last year. He wrote you. Expenses were very heavy, and of course he was unable to work."

"I have no doubt of it, madam, but that is a matter for which you can hardly hold me or the trust responsible."

"Oh, no, sir, certainly not. But we thought that, under the circumstances, you might be willing to give us a little more time."

"I do not see that the circumstances are such as to warrant me in making another extension of time for the payment of interest due. As I wrote you last week, sickness cannot alter figures, nor can death stop the accumulation of interest."

"I know, sir; and we are anxious to pay all that is due. We intend to do everything possible to raise the money. We could provide in some way for the loose debts if we could only have a little more time on this mortgage. Just a few months, maybe. We shall sell the hay in July, and that will go a long way toward paying the

The Cheerful Plowman



A CONSTRUCTIVE GAME

A CRIBBAGE game with Andrew Gile has many features worth the while, for we have many things to say that smack of business as we play. "Yes," he will say, "a pair is two—How does your barley seem to do?—a run or three, a double run—And how's the harvest, are you done?—yes, fifteen-four, and fifteen-six—And, are you buying any chicks?—ah, fifteen-eight and fifteen-ten—I am not hiring any men, the older boys are helping me—say, here's another run of three."

"I'll thresh the Durum from the stack—ah, peg up two, you turned the Jack—I'm sure the heaves colts used to have could have been cured by Jeppard's salve—four runs of three is twelve, I guess,—a dollar-forty, more or less, is what a farmer should receive for wheat, I honestly believe—three of a kind makes six, by jing,—just what I want. You turned the king—I'm going in for dairy stuff, grain farming doesn't yield enough—there, fifteen-two and fifteen-four, a pair, I see, but nothing more—they've brought me out for township clerk, not knowing how I hate to work—there's fifteen-six and fifteen-eight—by jove, I fear it's getting late!"

Yes, cribbage with good Andrew Gile is always doubly worth the while for we don't play for life and death with blood-shot eyes and bated breath, we play to have a bit to do while we talk all our problems through. We mix our flushes with our cows, our fifteen-sixes with our plows, we stir up acorns, queens and kings with chickens, plums and other things; the points we make, I swear by Jegg, we oftentimes forget to peg, we never know just where we're at, who's deal it is, and things like that,—for errors are not classed as sins and no one cares a whoop who wins!

(To be continued.)

interest. And we do so want to save the place we've lived on it eighteen years."

In spite of her resolution to hold herself in the tears gathered in the widow's eyes, and the handkerchief which she had been nervously folding and unfolding as she talked was now put to the task of wiping them away.

If there was anything John Imberlay disliked it was to see a woman shed tears. He turned patiently to his desk and picked up one of the papers lying before him.

"I can't help all that, Mrs. Leighton," he said shortly. "As I have already written you, this purely a business transaction; and while, as an individual, I might be inclined to sympathize with you, and to grant the extension you ask for, as trustee I must consider my duty to the trust. View of Mr. Leighton's illness and death, I have waited for more than a year for the payment of interest due. I have been more lenient than I have any right to be. I feel that I must not go any farther in that direction. And I may as well tell you plainly that if the interest now due is not paid without further delay, I shall be obliged to foreclose the mortgage."

The widow, weeping softly, did not reply, but her son spoke up: "Then we are to understand that if the interest due is not paid at once the place will be sold?"

"That is practically the situation," said the banker, coldly.

"That will be two years' interest at six per cent on two thousand dollars?"

"Exactly."

Robert turned to his mother. "We can't raise it," he said. "It will be two hundred and forty dollars. It would take a year, maybe two years, for the place to earn that much money for us after we've had our living from it. I guess you have to go, mother. You see," he continued, addressing the banker, "I can't work much on the farm myself, on account of my lameness, and my brother, is only ten years old. And when you have to hire all your work done, there's no money in farming."

It occurred to the banker that this boy talked very sensibly for one of his years.

"And since you cannot work on the farm," he inquired, "what do you intend to do for a living?"

"I shall take the examination for a teacher's certificate this month," was the prompt reply. "If you try to get a district school in the fall."

"And how much will that pay you?"

"Oh, from twenty to thirty dollars a month, plus haps, during the winter."

"Do you think you can pass the examination?"

"I believe so. I was graduated from the Broad Valley High School this spring."

It was a strange turn the conversation was taking. A kindly and unusual interest was manifest in the banker's face. The widow, too, had dried her tears, and a look of motherly pride dwelt in her eyes as she said:

"He stood at the head of his class, Mr. Imberlay, and took the Wagner mathematical prize besides."

"Indeed! That was a very creditable thing for him to do, I am sure."

"Yes, and Robert is such a good boy, too!"

"Mother!" The boy's face was red with confusion. It embarrassed him to have his virtue paraded in this way in his presence. "What has all this to do with the mortgage? It is clear that we can't pay the interest, much less any part of the principal. We must either sell the place or let the banker with a question."

"Mr. Imberlay, if I should turn in to you one-half of the salary I shall receive for teaching, as soon as and as often as I receive it, could you hold the matter open for a time?"

The look of interest died out of the banker's face, and the old, stern expression came back.

"No," he replied, "that would be only an annoyance."

"Suppose I should turn over two-thirds of it?"

"It wouldn't do."

"All of it, then?"

"I tell you I have but one proposition to make to you. All the interest due must be paid within ten days, or I shall proceed to foreclose the mortgage and sell the farm."

The banker turned to his desk and picked up his papers, as if to indicate that the interview was at an end. The widow had again taken to folding and unfolding her handkerchief, and the look of distress deepened in her eyes.

For the kiddies party, provide blackened paper for each youngster to wear. Faces may be blackened using orange chalk or crayon, and cut

The Farm Home

In Vogue Today

TWO very large, plump women attracted my attention one day this week while I was lunching in a restaurant. One of the women wore a bright green gown that would be noticed by several strings of pearls draped over her shoulders.

I wish some one could explain to me why large women do not realize that high colors and large patterns are not for them. There are lovely materials in darker tones and, if one must have patterned stuff, there are small, inconspicuous designs.

Perhaps you recall the advice of a world-famous authority to a stout woman who had come to him for help: "When God made the butterflies He dressed them in gorgeous colors but when He made the elephant He gave him a coat of neutral gray."

Gay colors stand out—one looks the second and third time. The silhouette is noticeable and, in the case of some advancing colors, it appears larger than it really is. This is all right if you happen to be a "but-

terfly." But the lady in the green dress was not, by any stretch of the imagination, a butterfly, and she showed lack of good taste in selecting such a costume.

Colors are delightful this fall and the darker the green, or wine, or brown you choose, the smarter you will be. Black is better than ever before. The report of a large silk house shows that sales of black outnumber sales of all other colors put together.

Short skirts still are noticeable. There was an excuse for them last fall when the longer skirts unexpectedly came into vogue, but after a year it does seem as though hems should come well down on the calf.

A woman with any ingenuity should be able to "let down" and bring up certificate this month," was the prompt reply. "If you try to get a district school in the fall."

"And how much will that pay you?"

"Oh, from twenty to thirty dollars a month, plus haps, during the winter."

"Do you think you can pass the examination?"

"I believe so. I was graduated from the Broad Valley High School this spring."

It was a strange turn the conversation was taking. A kindly and unusual interest was manifest in the banker's face. The widow, too, had dried her tears, and a look of motherly pride dwelt in her eyes as she said:

"He stood at the head of his class, Mr. Imberlay, and took the Wagner mathematical prize besides."

"Indeed! That was a very creditable thing for him to do, I am sure."

"Yes, and Robert is such a good boy, too!"

"Mother!" The boy's face was red with confusion. It embarrassed him to have his virtue paraded in this way in his presence. "What has all this to do with the mortgage? It is clear that we can't pay the interest, much less any part of the principal. We must either sell the place or let the banker with a question."

"Mr. Imberlay, if I should turn in to you one-half of the salary I shall receive for teaching, as soon as and as often as I receive it, could you hold the matter open for a time?"

The look of interest died out of the banker's face, and the old, stern expression came back.

"No," he replied, "that would be only an annoyance."

"Suppose I should turn over two-thirds of it?"

"It wouldn't do."

"All of it, then?"

"I tell you I have but one proposition to make to you. All the interest due must be paid within ten days, or I shall proceed to foreclose the mortgage and sell the farm."

The banker turned to his desk and picked up his papers, as if to indicate that the interview was at an end. The widow had again taken to folding and unfolding her handkerchief, and the look of distress deepened in her eyes.

For the kiddies party, provide blackened paper for each youngster to wear. Faces may be blackened using orange chalk or crayon, and cut

corn stalks further bedecked with gay pumpkins from which grin the weird faces of Jack O'-Lanterns.

Be sure to bob for apples some time during the event. Even if you are careful about the little tots' heads and object to the usual "ducking" that goes with this game, let these kiddies have long spears (hat pins) to do their bobbing.

Decorate the table with your old iron kettle or dutch oven for the centerpiece. It makes a fine "witches cauldron" if perched on an autumn bed of woody twigs. Burning incense in the kettle adds weird charm as well as spooky fragrance enjoyed by old and young. Dress a few tall clothes pins in black crepe paper frocks and you have good witches to perch here and there among the twigs extending out from the kettle.

The "Black Magic" cake may be just your favorite recipe for white cake. Add to the poured batter square of melted chocolate just before baking. Add this in drops here and there, and into each slip the tokens that charm. Wrap very securely in waxed paper the usual "signs"—a penny for wealth, a button for single blessedness, ring for wedded bliss, thimble for old maid, key for happy trip, etc. Ice the cake with orange icing and decorate with a Halloween face made with licorice candies. These same candies may be used to put a jolly face on the ice cream or salad.

Gertrude S. Stewart.

For the kiddies party, provide blackened paper for each youngster to wear. Faces may be blackened using orange chalk or crayon, and cut

corn stalks further bedecked with gay pumpkins from which grin the weird faces of Jack O'-Lanterns.

Be sure to bob for apples some time during the event. Even if you are careful about the little tots' heads and object to the usual "ducking" that goes with this game, let these kiddies have long spears (hat pins) to do their bobbing.

Decorate the table with your old iron kettle or dutch oven for the centerpiece. It makes a fine "witches cauldron" if perched on an autumn bed of woody twigs. Burning incense in the kettle adds weird charm as well as spooky fragrance enjoyed by old and young. Dress a few tall clothes pins in black crepe paper frocks and you have good witches to perch here and there among the twigs extending out from the kettle.

The "Black Magic" cake may be just your favorite recipe for white cake. Add to the poured batter square of melted chocolate just before baking. Add this in drops here and there, and into each slip the tokens that charm. Wrap very securely in waxed paper the usual "signs"—a penny for wealth, a button for single blessedness, ring for wedded bliss, thimble for old maid, key for happy trip, etc. Ice the cake with orange icing and decorate with a Halloween face made with licorice candies. These same candies may be used to put a jolly face on the ice cream or salad.

Gertrude S. Stewart.

For the kiddies party, provide blackened paper for each youngster to wear. Faces may be blackened using orange chalk or crayon, and cut

slits for the eyes and nose. Binder twine may be opened into threads and run in and out of the bag for heavy whiskers. Quite grown-up children have masked in this get-up and had wonderful good times.

Unlock and dust the dear old phonograph, hunt up the marches and liveliest favorites. With a march playing and the very cleverest person present as leader, start off your party with "Follow the Leader." Among the wild things you might be asked to do are: creep noiselessly on all fours, hop on one foot, skate over a slippery place previously arranged, climb over a rickety ladder, imitate a black cat (crouching and springing) imitate wild witches riding across the sky, shake hands with a ghost who wears a slippery wet rubber glove, etc., etc. Dim lights increase the frolic.

For your party, no place adds such merriment as the barn floor, the spacy attic or the open stretch of a country cellar. All storage can be pushed back for the evening and well hidden with

corn stalks further bedecked with gay pumpkins from which grin the weird faces of Jack O'-Lanterns.

Be sure to bob for apples some time during the event. Even if you are careful about the little tots' heads and object to the usual "ducking" that goes with this game, let these kiddies have long spears (hat pins) to do their bobbing.

Decorate the table with your old iron kettle or dutch oven for the centerpiece. It makes a fine "witches cauldron" if perched on an autumn bed of woody twigs. Burning incense in the kettle adds weird charm as well as spooky fragrance enjoyed by old and young. Dress a few tall clothes pins in black crepe paper frocks and you have good witches to perch here and there among the twigs extending out from the kettle.

The "Black Magic" cake may be just your favorite recipe for white cake. Add to the poured batter square of melted chocolate just before baking. Add this in drops here and there, and into each slip the tokens that charm. Wrap very securely in waxed paper the usual "signs"—a penny for wealth, a button for single blessedness, ring for wedded bliss, thimble for old maid, key for happy trip, etc. Ice the cake with orange icing and decorate with a Halloween face made with licorice candies. These same candies may be used to put a jolly face on the ice cream or salad.

Gertrude S. Stewart.

For the kiddies party, provide blackened paper for each youngster to wear. Faces may be blackened using orange chalk or crayon, and cut

corn stalks further bedecked with gay pumpkins from which grin the weird faces of Jack O'-Lanterns.

Be sure to bob for apples some time during the event. Even if you are careful about the little tots' heads and object to the usual "ducking" that goes with this game, let these kiddies have long spears (hat pins) to do their bobbing.

Decorate the table with your old iron kettle or dutch oven for the centerpiece. It makes a fine "witches cauldron" if perched on an autumn bed of woody twigs. Burning incense in the kettle adds weird charm as well as spooky fragrance enjoyed by old and young. Dress a few tall clothes pins in black crepe paper frocks and you have good witches to perch here and there among the twigs extending out from the kettle.

The "Black Magic" cake may be just your favorite recipe for white cake. Add to the poured batter square of melted chocolate just before baking. Add this in drops here and there, and into each slip the tokens that charm. Wrap very securely in waxed paper the usual "signs"—a penny for wealth, a button for single blessedness, ring for wedded bliss, thimble for old maid, key for happy trip, etc. Ice the cake with orange icing and decorate with a Halloween face made with licorice candies. These same candies may be used to put a jolly face on the ice cream or salad.

Gertrude S. Stewart.

For the kiddies party, provide blackened paper for each youngster to wear. Faces may be blackened using orange chalk or crayon, and cut

corn stalks further bedecked with gay pumpkins from which grin the weird faces of Jack O'-Lanterns.

Be sure to bob for apples some time during the event. Even if you are careful about the little tots' heads and object to the usual "ducking" that goes with this game, let these kiddies have long spears (hat pins) to do their bobbing.

Decorate the table with your old iron kettle or dutch oven for the centerpiece. It makes a fine "witches cauldron" if perched on an autumn bed of woody twigs. Burning incense in the kettle adds weird charm as well as spooky fragrance enjoyed by old and young. Dress a few tall clothes pins in black crepe paper frocks and you have good witches to perch here and there among the twigs extending out from the kettle.

The "Black Magic" cake may be just your favorite recipe for white cake. Add to the poured batter square of melted chocolate just before baking. Add this in drops here and there, and into each slip the tokens that charm. Wrap very securely in waxed paper the usual "signs"—a penny for wealth, a button for single blessedness, ring for wedded bliss, thimble for old maid, key for happy trip, etc. Ice the cake with orange icing and decorate with a Halloween face made with licorice candies. These same candies may be used to put a jolly face on the ice cream or salad.

Gertrude S. Stewart.

For the kiddies party, provide blackened paper for each youngster to wear. Faces may be blackened using orange chalk or crayon, and cut

corn stalks further bedecked with gay pumpkins from which grin the weird faces of Jack O'-Lanterns.

Be sure to bob for apples some time during the event. Even if you are careful about the little tots' heads and object to the usual "ducking" that goes with this game, let these kiddies have long spears (hat pins) to do their bobbing.

Decorate the table with your old iron kettle or dutch oven for the centerpiece. It makes a fine "witches cauldron" if perched on an autumn bed of woody twigs. Burning incense in the kettle adds weird charm as well as spooky fragrance enjoyed by old and young. Dress a few tall clothes pins in black crepe paper frocks and you have good witches to perch here and there among the twigs extending out from the kettle.

The "Black Magic" cake may be just your favorite recipe for white cake. Add to the poured batter square of melted chocolate just before baking. Add this in drops here and there, and into each slip the tokens that charm. Wrap very securely in waxed paper the usual "signs"—a penny for wealth, a button for single blessedness, ring for wedded bliss, thimble for old maid, key for happy trip, etc. Ice the cake with orange icing and decorate with a Halloween face made with licorice candies. These same candies may be used to put a jolly face on the ice cream or salad.

Gertrude S. Stewart.

For the kiddies party, provide blackened paper for each youngster to wear. Faces may be blackened using orange chalk or crayon, and cut

corn stalks further bedecked with gay pumpkins from which grin the weird faces of Jack O'-Lanterns.

Be sure to bob for apples some time during the event. Even if you are careful about the little tots' heads and object to the usual "ducking" that goes with this game, let these kiddies have long spears (hat pins) to do their bobbing.

Decorate the table with your old iron kettle or dutch oven for the centerpiece. It makes a fine "witches cauldron" if perched on an autumn bed of woody twigs. Burning incense in the kettle adds weird charm as well as spooky fragrance enjoyed by old and young. Dress a few tall clothes pins in black crepe paper frocks and you have good witches to perch here and there among the twigs extending out from the kettle.

The "Black Magic" cake may be just your favorite recipe for white cake. Add to the poured batter square of melted chocolate just before baking. Add this in drops here and there, and into each slip the tokens that charm. Wrap very securely in waxed paper the usual "signs"—a penny for wealth, a button for single blessedness, ring for wedded bliss, thimble for old maid, key for happy trip, etc. Ice the cake with orange icing and decorate with a Halloween face made with licorice candies. These same candies may be used to put a jolly face on the ice cream or salad.

Gertrude S. Stewart.

For the kiddies party, provide blackened paper for each youngster to wear. Faces may be blackened using orange chalk or crayon, and cut

corn stalks further bedecked with gay pumpkins from which grin the weird faces of Jack O'-Lanterns.

Be sure to bob for apples some time during the event. Even if you are careful about the little tots' heads and object to the usual "ducking" that goes with this game, let these kiddies have long spears (hat pins) to do their bobbing.

Decorate the table with your old iron kettle or dutch oven for the centerpiece. It makes a fine "witches cauldron" if perched on an autumn bed of woody twigs. Burning incense in the kettle adds weird charm as well as spooky fragrance enjoyed by old and young. Dress a few tall clothes pins in black crepe paper frocks and you have good witches to perch here and there among the twigs extending out from the kettle.

The "Black Magic" cake may be just your favorite recipe for white cake. Add to the poured batter square of melted chocolate just before baking. Add this in drops here and there, and into each slip the tokens that charm. Wrap very securely in waxed paper the usual "signs"—a penny for wealth, a button for single blessedness, ring for wedded bliss, thimble for old maid, key for happy trip, etc. Ice the cake with orange icing and decorate with a Halloween face made with licorice candies. These same candies may be used to put a jolly face on the ice cream or salad.

Gertrude S. Stewart.

For the kiddies party, provide blackened paper for each youngster to wear. Faces may be blackened using orange chalk or crayon, and cut

corn stalks further bedecked with gay pumpkins from which grin the weird faces of Jack O'-Lanterns.

Be sure to bob for apples some time during the event. Even if you are careful about the little tots' heads and object to the usual "ducking" that goes with this game, let these kiddies have long spears (hat pins) to do their bobbing.

Decorate the table with your old iron kettle or dutch oven for the centerpiece. It makes a fine "witches cauldron" if perched on an autumn bed of woody twigs. Burning incense in the kettle adds weird charm as well as spooky fragrance enjoyed by old and young. Dress a few tall clothes pins in black crepe paper frocks and you have good witches to perch here and there among the twigs extending out from the kettle.

The "Black Magic" cake may be just your

TWO HELPERS INSTEAD OF ONE IN EVERY BAR
That's why

FELS-NAPTHA BRINGS EXTRA HELP TO EVERY SOAP-AND-WATER JOB

WEEKLY WASHING or daily household cleaning—there isn't a single soap-and-water task that can't be done easier and quicker with the aid of Fels-Naptha.

Just smell a Fels-Naptha bar—and you'll know why. There's naphtha in Fels-Naptha—your nose proves it. Plenty of naphtha combined with good golden soap. So you get two cleaners instead of one. And working together, they give you extra help that loosens the most stubborn dirt and washes it away without hard rubbing.

In tub or machine; hot, lukewarm or even cool water; and whether you soak or boil your clothes, Fels-Naptha works splendidly—bringing you fresh, sweet, clean home-washed clothes. Try it for household cleaning, too. It's gentle to hands. For it loosens dirt so quickly

that it gets them out of water sooner. Ask your grocer for Fels-Naptha today and get a real washday bargain. A bargain that brings you not more soap, but more help. Extra help that saves you!

SPECIAL OFFER—We'll be glad to send every user of laundry soap a Fels-Naptha Chipper. Many women who chip Fels-Naptha into their washing machines, tubs or basins find this chipper handier than a knife. Use it and Fels-Naptha to make fresh, golden soap chips (that contain plenty of naphtha!) just as you need them. Send only a two-cent stamp to help cover postage, and we'll mail you this chipper without further cost. Write today. Dept. 7-10-25. Fels & Company, Philadelphia, Pa.

THE GOLDEN BAR WITH THE CLEAN NAPHTHA ODOR
FELS-NAPHTHA

Cuticura Soap
Mother's Favorite for
All the Family
Price 25c. Sample free.
Address: "Cuticura," Dept. 108, Malden, Mass.

QUICK RELIEF
COLDS
Antiseptic Japanese
Oil often breaks up a
cold in 24 to 48 hours.
For head colds, bron-
chitis, larynx, throat,
chest cold, sore throat,
congestion, flu, influenza,
etc. 40 Years Success, At
Druggists.
JAPANESE OIL

**LET US TAN
YOUR HIDE**
FUR DRESSERS AND TAXIDERMISTS
SEND FOR CATALOG
The Crosby Frisian Fur Company
664 Lyell Avenue Rochester, N. Y.

How to keep Warm in Zero weather
Wear **Indera** **FIGURE FIT** **KNIT SLIP**
REG. U.S. PAT. OFF.

You don't have to bundle up like an Eskimo to keep warm this winter. A light weight, smart fitting, Indera Figure Fit Knit Slip gives you all the warmth you need, even in the coldest weather. For Indera is knitted by a special process that keeps warmth in and cold out. And you can wear it underneath your street clothes. For Indera never annoys you by bunching between your knees or riding up around your hips. The patented border prevents that. And the shoulder straps stay up, always. They're STA-UPS! Found only at Indera. Indera is made in a wide variety of fast color combinations. All wool, wool and rayon, wool and cotton, also cotton. Easy to launder without ironing. At your favorite store. For women, misses, children. **Indera Style Folder No. 82 in color sent FREE. Please mention dealer's name and address.** **INDERA MILLS CO., Winston-Salem, N. C.**

Conservative buyers

THE AMERICAN FARMER is always in the market. So's his wife. The entire family, in fact. And for seeds, fertilizers, machinery. Mother for furniture, household supplies. Jack may need a bicycle or rifle. And you know how the modern farm-girl likes to be up to date in everything. A thousand and one needs arise on the average farm.

Farm-fathers, however, are conservative buyers. They don't purchase things haphazardly. They make use of every opportunity to select just what they want. Common sense tells them which product will bring the most for the money they are able to spend.

Conservatism and success usually run parallel. Many of the most successful farmers read advertisements printed in this journal. They have learned that standard goods are more than experiments; that they can be bought with confidence; that no manufacturer could afford to advertise an inferior product consistently.

Advertised merchandise means definite savings. Advertisements tell you what a product will do, where it can be had, and how much it will cost. When you find yourself in need of a pair of boots, an engine, a new stove—anything—pick up your favorite farm-paper and read the "ads." They will tell you what you can get and what you will receive—before you get it.



We Can't Have Too Many Frocks

No. 6996.—Ladies' dress. Cut in five sizes: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 4½ yards of 39-inch material. For contrasting material cut crosswise is required. Price 15c or two for 25c.
No. 6999.—Ladies' dress with slender hips. Cut in eight sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 46-inch size requires 5 yards of 39-inch material. For contrasting material ¾ yard 39 inches wide is required cut crosswise. Price 15c or two for 25c.
No. 7000.—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires 4½ yards of 39-inch material. For contrasting material ¾ yard 39 inches wide is required cut crosswise. Price 15c or two for 25c.
No. 6712.—Ladies' dress. Cut in four sizes: 2, 4, 6 and 8 years. A 4-year size requires 1½ yards of 35-inch material. To face collar and band cuffs with contrasting material requires ¼ yard of 35-inch material cut crosswise. Price 15c or two for 25c.
No. 7006.—Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size with bolero and sleeves in wrist length will require 6½ yards 39 inches wide. With sleeve in ¾ length, 6¾ yards will be required. Without bolero and sleeves, 4½ yards will be required. Collar, tie ends, and lining for sleeve in wrist length will require ¼ yard of contrasting material.
No. 6991.—Girls' dress. Cut in four sizes: 8, 10, 12 and 14 years. A 12-year size requires 2½ yards of 36-inch material. For collar, cuffs and belt of contrasting material ¾ yard 36 inches wide is required. Price 15c or two for 25c.
No. 6585.—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. A 12-year size requires 2½ yards of 32-inch material. Together with ¾ yard of contrasting material cut crosswise. Price 15c or two for 25c.
No. 6452.—Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. A 6-year size requires 2½ yards of 32-inch material. Face flaps of contrasting material on collar and belt and cuffs will require ¼ yard 36 inches wide, and cut crosswise. Price 15c or two for 25c.
No. 6653.—Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. A 4-year size requires 1½ yards of 35-inch material. For collar and cuffs of contrasting material ¼ yard is required 35 inches wide cut crosswise. Price 15c or two for 25c.
No. 6239.—Girls' dress with bolero. Cut in three sizes: 2, 4 and 6 years. A 4-year size requires 2½ yards of 35-inch material. Together with 1½ yards of contrasting material, 1½ yards of 35-inch material, 1½ inches wide, cut crosswise. Price 15c or two for 25c.

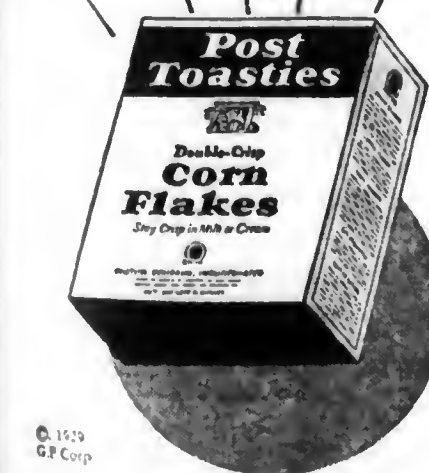
HOW TO ORDER

Write plainly, giving pattern number and size. Address Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

**In these
oven-crisp
flakes there's
energy
..quick new
energy...
for you**



**eat
POST
Toasties**
The Wake-up Food



Hints for Homemakers

A LITTLE raw tomato juice is excellent for removing unsightly stains from the hands, caused by paring vegetables. Lemon juice can be used for the same purpose.

If your gravies refuse to brown properly, add a teaspoon of burnt sugar diluted in a tablespoon of cold water. You'll be surprised by the delightful golden brown color.

No medicine can take the place of water in its healthful effect upon the human system. At least one glass of water for every fifteen pounds in weight should be drunk by every adult every day.

An Old Table Transformed

MY success in rescuing an old table (that had been knocking about the place for years), and remodeling it (with the help of the "handy man" at our house) into a useful and good-looking bit of furniture has prompted me to pass along the idea.

I wanted a desk or writing table for my "very own." Could the old drop-leaf table be made presentable and convenient? Let me tell you.

The wood was beautiful dark red cherry—cherry is one of the smoothest, easiest woods to work with, at least for the amateur.

The table top was marred but we overcame that by removing it and replacing it bottom-side up. During this process it was found necessary to fit a narrow strip in the center for tables of this style do not project over the frame at the sides as we preferred. The strip may be taken from a leaf if the leaves are oblong and will match more perfectly than wood from another source.

When the opening once filled by the swinging supports for leaves was occupied by the front of a 20x20-inch drawer (wooden knobs from the five-and-ten for this) and the whole table given the fine finish the lovely wood seemed to demand, I much preferred it to the ordinary desk.

Now it stands, satiny and aristocratic-looking on its tall, spindle legs, under the light in the living-room, holding the typewriter, my best Bible, the late magazines, etc.—one of our best-liked pieces of furniture.

Perhaps it earned this restoration to beauty and usefulness, having served well as a dining table in the days when families were families.

Mrs. Mae Smith.

Concerning Curtains

LIGHT is an enemy of curtains just as curtains are enemies of light, according to Beulah Blackmore of the New York state college of home economics at Cornell University.

Holes which appear in curtains and drapes during laundering are often caused by light instead of improper laundry treatment. The exposed fabrics of curtain materials gradually become so tender that they fall apart when they are washed.

Rayon or silk curtains which have been attacked by light are most easily torn when wet because these fibres become especially tender in water.

To determine whether a curtain has been harmed by light the upper and lower portions of the curtain may be compared. Usually the upper section which has been protected from light by window shades is far stronger.

**"Not one poor cake
since I discovered Calumet"**



**And here's the secret...
Calumet's DOUBLE-ACTION**

EVERYWHERE, delighted women are finding out—Calumet makes baking success easy and sure!

The secret?—it's simple! Calumet acts twice, not just once. And this remarkable Double-Action makes the greatest difference in baking. It adds to your baking a touch of genius! Special lightness! Extra delicacy and fineness of texture. Such unusual perfection that you'll enjoy new pride in everything you bake.

Calumet's first action begins in the mixing bowl. It starts the leavening. Then, in the oven, the second action begins. It continues the leavening. Up!... up!... it keeps raising the batter and holds it high and light. Cakes, muffins, quick breads bake beautifully, even though you may not be able to regulate your oven accurately.

All baking powders are required by law to be made of pure, wholesome ingredients. But not all are alike in their action nor in the amount that should be used. And not all will give you equally fine results in your baking. Calumet is scientifically made of exactly the right ingredients, in exactly the right proportions to produce perfect leavening action—Double-Action!

Make a Calumet cake to-day. Taste it—compare! Then you'll know why Calumet is the largest-selling baking powder in the world. Remember to use only one level teaspoon of Calumet to each cup of sifted flour. This is the usual Calumet proportion and should be followed for best results—a splendid economy which the perfect efficiency of Calumet's leavening action makes possible. Send for the wonderful new Calumet Baking Book. Mail coupon NOW!



MAKE THIS TEST

Naturally, when baking, you can't see how Calumet's Double-Action works inside the dough or batter to make it rise. But, by making this simple demonstration with Calumet Baking Powder and water in a glass, you can see clearly how Calumet acts twice to make your baking better. Put two level teaspoons of Calumet into a glass, add two teaspoons of water, stir rapidly five times and remove the spoon. The tiny, fine bubbles will rise slowly, half filling the glass. This is Calumet's first action—the action that Calumet specially provides to take place in the mixing bowl when you add liquid to your dry ingredients.

After the mixture has entirely stopped rising, stand the glass in a pan of hot water on the stove. In a moment, a second rising will start and continue until the mixture reaches the top of the glass. This is Calumet's second action—the action that Calumet holds in reserve to take place in the heat of your oven. Make this test to-day. See Calumet's Double-Action which protects your baking from failure.

CALUMET The Double-Acting
Baking Powder

A Product of General Foods Corporation

FREE NEW CALUMET BAKING BOOK
MARION JANE PARKER
c/o Calumet Baking Powder Company, Inc.
4100 Fillmore Street, Chicago, Ill.
Please send me, free, a copy of the new Calumet Baking Book.
Name _____
Street _____
City _____ State _____
Fill in completely—print name and address.



Historical Contest

JUST what do you know about the history of your country? Here is a good chance to find out. Last year we had such fun finding the questions asked in the Patriotic Contest and since so many have requested that we have another, here is the first list. Please don't ask us to send the lists you are unfortunate enough to miss. There will be four lists of questions—one appearing each week. DO NOT send in your lists until the final one appears. However, clip out the list of questions each week, write the answers in neatly and keep them carefully until the final list appears.

1. Who was the first white child born on the American continent?
2. How old was George Washington when he was appointed Commander-in-Chief?
3. Give the month, day and year he was appointed.
4. How long did it take Lindbergh to fly from New York to Paris without a stop?
5. Give the month and the year when he made this memorable trip.
6. What president was called "Old Rough and Ready?"
7. Who is often spoken of as "Our Unhappiest President?"

Keep this list until the final list is printed.

Winners at Round-Up

THE Highland Four-H Baby Beef Club of Cambria county finished its year's activity in a round-up show and sale held on the Cambria County Fair Grounds.

There were 26 boys and girls in this club and all were on deck to show and sell their calves. The baby beves, consisting of 25 Herefords and one Shorthorn, were the best ever fed by the boys and girls in this county.

John Pryce of Ebensburg showed the grand champion calf. This animal was picked, nicely finished and smooth and made a gain of exactly two pounds a day for the 320-day feeding period. John not only showed the grand champion but it took first place in the final placing of the boys and girls. Three other calves fed by Marguerite Pryce, Gene Wissinger and Charlotte Davis gained more than an average of two pounds a day.

In the final placings John Pryce won first, his sister Marguerite Pryce won second. Prizes then followed in order: Robert Griffith, Betty Burnard, Anna Hughes, Richard Davis, Roger Hughes, Alice Jones, Gene Wissinger and Charlotte Davis.

The prices they received were what one would expect under the present conditions of the beef market. The

The Young People

grand champion brought \$15.50 per cwt. The lowest price any one received was \$12 per cwt. The calves were bought by buyers from Altoona and Johnstown.

Charles M. Schwab presented the prizes to the winners before a large group of parents and friends who gathered in the big arena for the occasion. To the boys and girls he said: "We must be good merchants and keep on going. If we lose this year we will come back next year and make it up."

This was the sixth year that Cambria county has had a Baby Beef Club. Many of the boys and girls have come back year after year and fed their

Robert S. Heath; 7, Robert Nageotte; 8, Bob Reed; 9, Mildred Sperry; 10, Neil Lang. The members were awarded ribbons.

Miss Harmony Hutchinson, Club Leader for the girls and Miss Wulff, Home Economics worker of Crawford County, held a judging contest in sewing. Ribbons were awarded to the following club girls:

Luella McCurdy, Lois McCurdy, Marion Ellis, Arvilla Meyers, Mary McMaster, Thelma Spring, Doris Spring, Helene Keen, Gertrude Sutton, Dorothy Watson, Marion Blue, Jane Kellogg, Freda Laird, Emylen Knox, Marion Pond, Lela Ingraham, Louise Ingraham, June Osgood, Mil-



Crawford County Four-H Club Members and Leaders.

calves. No boy or girl has won the championship more than once. Some years these young feeders have made money, other years they have lost, but then, that is the luck of cattle feeders. But the money is not the only motive these youngsters have in feeding their calves for as one Dad said: "My children haven't made a great deal of money in this project but surely the whole family got a heap of fun out of the feeding and care of the calves." James F. Keim.

Four-H Field Day

AT the Crawford County Fair, Conneaut Lake, Pa., a Four-H Club Field Day was held September 25th. Mr. A. L. Baker, State Club Leader, was in charge of the program for the boys, which included the Conneaut Lake Jersey Calf Club round-up and judging by Prof. E. B. Fitts. Immediately following this a judging contest was held at which time the club members' class of Holstein and Jersey cows was judged and the following boys were among the high ten in this contest:

1, Walton Smith; 2, William Whitman; 3, Roderick Sharp; 4, Keith Merchant; 5, Junior Heberling; 6,

Halloween Night

It's ghostly Halloween night. Strange figures appear in the bright moonlight. Ghosts of people long buried and dead. White robed spirits and a grinning death's head. The wind moans and shrieks and howls. And far away the black cat yowls. A pumpkin's head grins from a high fence rail. Let the weakling hide and the coward pale. For 'tis Halloween the All Saints night. When you had best be sure that you're safe and tight. For bells will be rung and gates carried away. And all sorts of pranks will the goblins play.

Jacqueline M. Parsons.



Week-by-Week Contests

REMEMBER there are always prizes for the boys and girls who send contributions. The drawings at the top of the page this week are by two girls whose work has appeared here frequently. The young lady in the party dress is the work of Helen Minnis of Pennsylvania, while the wind-blown little girl was drawn by Gertrude Wilson of New York.

Send your contributions to Young People's Editor, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

A Game for All

Behind the Blanket

Players are divided into two groups, each group having a blanket. One person is chosen from each group to hold the blanket in front of him, and try to hide from the one in the other group who has the blanket. Each player holding the blanket tries to find out who is behind the other blanket without being recognized himself. The one who first guesses correctly who the other one is, makes a score for his side; then some one else is chosen.

Little Folks' Corner

Timmy Twitchet and the Big Box

By RUTH PLUMLY THOMPSON

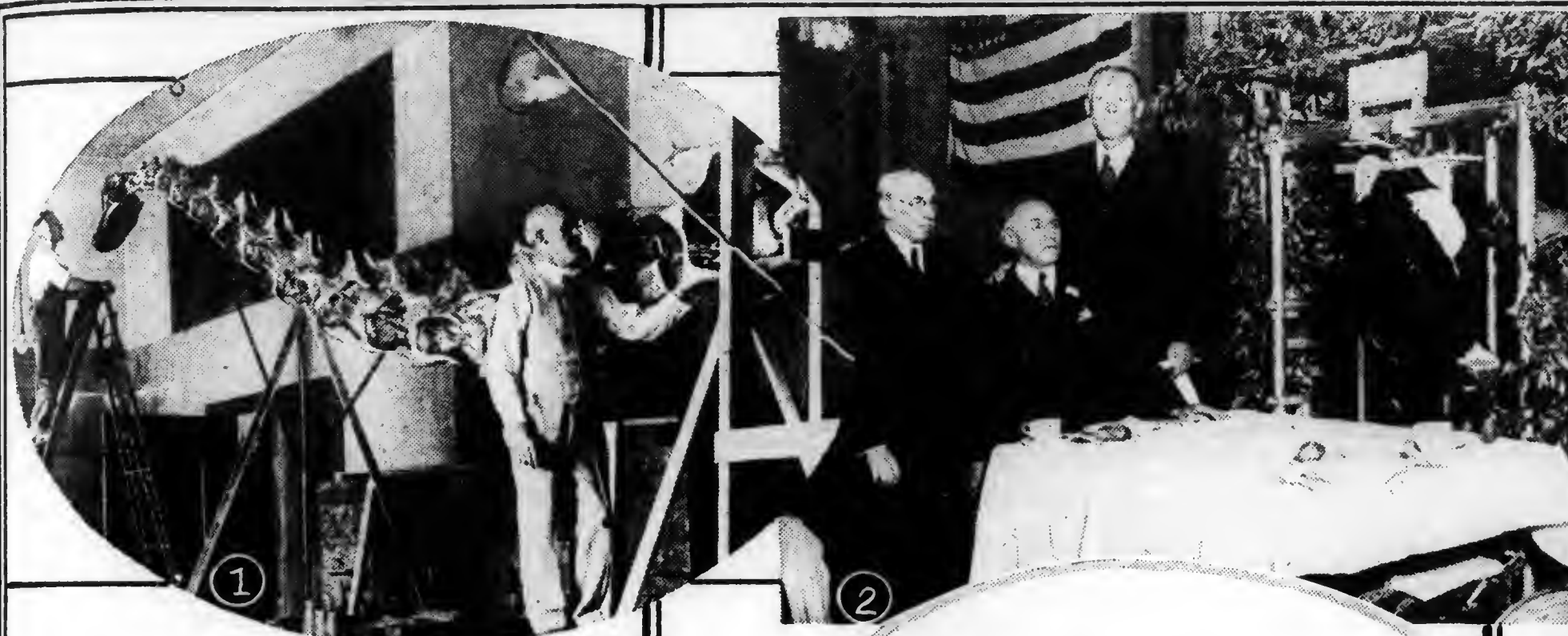
(Continued from Last Week.)

"What now?" puffed Timmy, for he had run all the way from his third story and was out of breath. "What now?" Carefully he tapped the great box with the gold pencil he always carried for a cane. Then he put his head on one side and stroked his whiskers. "Hah!" quoth Timmy Twitchet at last, "I know what this is! What fun! What luck! Fetch your tool box, Wee Bit and we'll have it going in no time. In the twinkling of a tail, Tiny Wee Bit, the village carpenter was back with his tools. First he and Timmy, climbing on a ladder slipped a cord under the lid of the box. Then all of the mice, standing on a chair back of the box, pulled and tugged till the lid came up.

"There you are!" beamed Timmy, "There you are!" And as the mice still looked mystified he ran up the ladder, jumped on the round green disk on top of the box, touched a small spring and whizzed round and round and round before the astonished eyes of his friends and neighbors. For Hurray! The box was a phonograph and though a phonograph is just a phonograph for two legs, it is a merry-go-round for mice. The finest merry-go-round this side of Coney Island as Timmy somewhat unsteadily assured them when the thing ran down and he stepped giddily off the top. Timmy had spent his prime in the library and was quite familiar with the workings of the great machine. That very afternoon he and Tiny Wee Bit rigged up ropes and pulleys so the villagers could turn the handle that wound it up and late the same evening the mouse men of the

Out in the cornfield a bright yellow pumpkin
Chuckled as well he might.
Thinking of pranks and what fun he would have when
Out with the boys on Halloween Night.
Bold Jack-o'-lanterns in windows to stare,
Eerie rappings and squeaks the grown-ups to scare.
Resolved to make merry as one of the crowd—
The big yellow pumpkin 'most laughed right out loud.

PASSING EVENTS IN PICTURES



1. Within a few weeks the skeleton of a huge prehistoric dinosaur, which once roamed the hills of Utah, will be placed on exhibition at the Smithsonian Museum in Washington.

The gigantic beast measured 75 feet from nose to tail and is the second largest in existence.

Dr. C. W. Gilmore, who supervised the work of recovering the skeleton, is seen at the right.

2. Madam Heather, tethered beneath a bow of leaves at the end of speaker's table, was an honor guest at dairy banquet recently held in Chicago.

This prize cow is a veritable milk factory. Her annual output is 25,000 pounds of milk. She is five years old, weighs 1,400 pounds, and has been winning prizes since she was three.

Photo shows, left to right—W. R. Dawes,

former president of the Association; Col. Fred Pabst, Wisconsin dairyman, and Gov. Walter J. Kohler of Wisconsin.

3. A huge buoy—larger than one would imagine if seen from a passing ship. This one weighs 20 tons.

4. A mishap during the Bushel Basket Championship Race, London, England—one of the contestants picking up his baskets after they had fallen. A. E. Sparks (left) was the winner of this novel race which was open to all employees of London Markets.

5. Petaluma, Calif.—A half a dozen beauties and hundreds of dozens of fresh eggs. This neighborhood reports a record-egg-laying season.

6. The weird new football headgear which will be used this year by Harvard. Here J. N. Trainer of the Varsity team is wearing the protective outfit.



(Copyright by Underwood & Underwood.)

The Twenty-Fourth National Dairy Exposition

FARM boys and financiers, country girls and society leaders, skilled showmen and serious scientists joined forces at St. Louis last week to pay homage to the dairy cow. The National Dairy Exposition brings together representatives of all phases of the industry from the man who breeds, feeds and milks cows to the ultimate consumer. And this year the consumer was represented at an early age, a baby show being one of the attractions of the week, thrown in with the poultry show and the horse show for good measure. But the cow and her offspring hold the limelight, and it is a question whether the farm-bred youngster with his carefully tended and highly manicured pet faces the judges with any more trepidation than does the sophisticated millionaire with his fashionable show herd on which he has spent a fortune.

In attendance, number of entries and quality of exhibits the 24th National Dairy Exposition must be recorded a success. By Wednesday night approximately 96,000 persons had gone through the gates and it was felt that last year's record, when the show was held in its new home for the first time, would be broken. About 1,600 head of cattle were on the grounds, compared with 120 head in the first show, which was held at Chicago. Now some herds contain as many cattle as the first national show attracted a quarter of a century ago.

A High Quality Exhibit

Not counting the Four-H Club exhibits, which totaled 285 head and made a complete show in itself, entries were as follows: Jerseys, 327 head; Ayrshires, 88; Brown Swiss, 117; Guernseys, 201, and Holsteins, 342. Nearly all classes were well filled and many contained twenty or thirty head. The quality of the best ones was as high as any show has brought forth, and there were no tail-enders. Breeders realize that every animal which steps into the arena is in fast company, and they do not bother to pay transportation on those of questionable merit. A pronounced change has taken place in the National within recent years in that the average show quality of the entries is higher. Hardly a class parades before the competent judges but it has those worthless scratching their noodles to find the best one, let alone placing a dozen others in their proper niches.

Old Friends Meet

The Exposition is more than a show of farm animals or a mold of breed types, important as those things are. It is also a gathering of the tribes, and a grand council of the sachems, where young and old, farmers and city folks, feed and equipment manufacturers, teachers and students meet and discuss the past, present and future of the business. It is a source of inspiration to the farmer, for here he gets a vivid glimpse of the magnitude and stability of his business, and it is a satisfaction to the many who have the welfare of dairying at heart. One weakness of the event, which

has been apparent since its beginning, is that too few farmers take advantage of the benefits to be derived from attending, although the attendance of farmers from nearby states was relatively large this year. Some indication of the nation-wide influence of the show is noted in the report of a policeman who took the trouble to count the cars from different states parked there. He found 33 states represented at one time.

Farm Conditions

If these visitors say what they think, and if their views are correct, the business of farming and dairying in particular are too firmly rooted in the economic well-being of the country to be seriously injured by the ills, real or fancied, which threaten it. In both formal and private discussions confidence was the prevailing theme. We did not hear the word "peasantry" mentioned, and the only reference to legislative panaceas for farming was to discredit them. The drought and unemployment are the two most depressing factors now. Unfortunately they cannot be prohibited by law.

The drought, which has been felt quite generally east of the Rockies, is not causing wholesale suffering. Some states have better crops than average. In Nebraska even the corn crop is unusually good. The South and the Corn Belt report varied conditions, ranging from a lost corn crop to average yields. In some places where the drought has been most severe no relief will be needed or requested, it is said, farmers being able to endure the loss of one year's crops. In most sections bankers and business men are helping in the matter of finance. The contribution of railroads through reduced rates on feed is an appreciated assistance. No feeling of panic was encountered, and the farmers themselves are the most philosophical about the situation, having faced and overcome obstacles before. The lack of moisture will cause individual privation and suffering in places, but the great mass of farmers will survive it without assistance.

Judging Contests

Judging contests have come to occupy a prominent place in leading shows. Three of nation-wide scope were staged at the Exposition, one each for vocational agriculture students, Four-H Club members and college students. Besides there was a daily free-for-all at which the ring-side talent was privileged to exercise its judgment of bovine beauty.

In the vocational milk judging contest the team from Guys Mills, Pa., was first with a score of 105.1. William Smith, Fred Bohn and Kermit Peterson composed the team. Mississippi was second and Tennessee third.

The vo-ag team from Hanford, Calif., took first in judging dairy cattle, with Tennessee second and Wyoming third. A total of 557 vocational agriculture students attended the show.

Twenty-five Four-H teams judged

cattle. First in all breeds was the team from Maryland composed of William Childcoat, Charles Clark and James Johnson. It scored 3,714 points out of a possible 4,000. Minnesota, Iowa, Nebraska, Ohio, Illinois and Michigan finished in the order named.

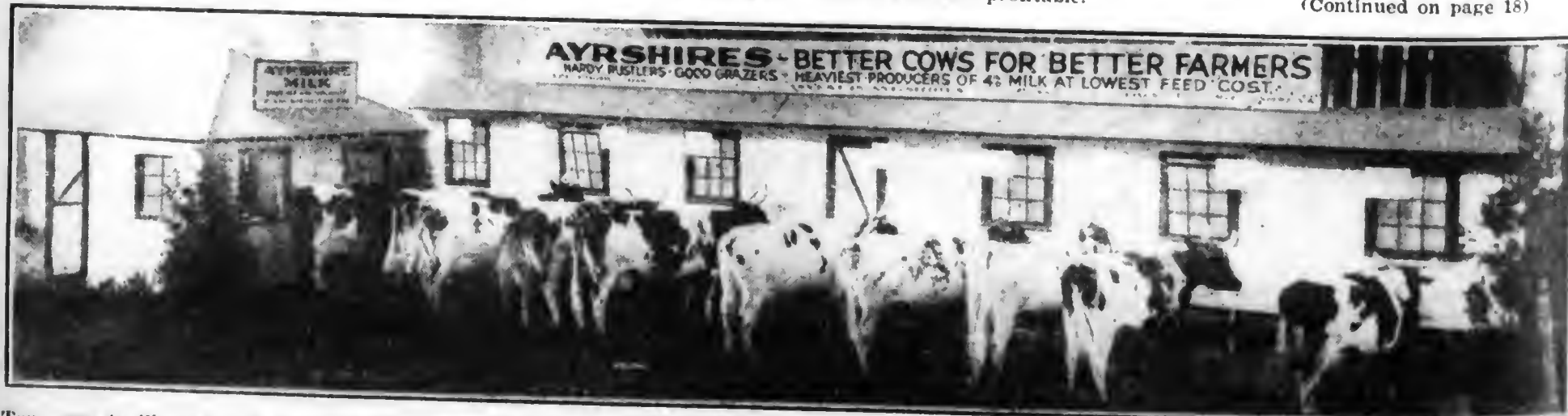
In the college students' judging contest the team from the Iowa State Agricultural College took first place. Donald Groves, Robert Stewart and Arthur Porter composed the team, while Elmer N. Hansen was their coach. Twenty-one college teams were entered. Others finished in the following order: Oklahoma, 2nd; Oregon, 3rd; Missouri, 4th; Illinois, 5th; Wisconsin, 6th; Ohio, 7th; Cornell, 8th; Michigan, 9th, and Pennsylvania 10th. Valuable cups, medals and scholarships constituted the prizes. H. W. Goble of the Ontario Agricultural College won a \$500 scholarship by being high man in judging Holsteins, while Ralph E. Hargrave of Missouri won a \$600 prize on Jersey judging. R. W. Robinson of West Virginia was second high man on Holsteins, while James Bohn of Pennsylvania took third in placing Jerseys. High man in judging all breeds was L. E. Kite of Michigan, with Herman Staff of Oklahoma second, Robert D. Stewart of Iowa third and Howard Bennett of Oregon fourth.

Valuable Training

Considerable suspense and ceremony is connected with the announcement of the college students' judging contest, which is made the climax of the American Dairy Science Association banquet. That the training for this contest is of value is indicated by noting how members of former teams have turned out. In the first team, which had no competition, O. E. Reed, head of the Dairy Bureau, U. S. Department of Agriculture, was a member. Forty-one states have taken part in past shows, entering 384 teams for a total of 1,154 contestants. Of these men 242 are farming, over a hundred are in college work, about the same number are county agents. Some 75 are in vocational agriculture teaching or managers of cooperative associations; 17 are in the U. S. Department of Agriculture; 14 are connected with farm publications, nine are selling insurance. A few others are doctors, lawyers or in the army. Only one is a minister, and none is in jail.

Displays dealing with particular phases of dairy work were available for the information of visitors. Among them was an exhibit telling the story of the National Dairy Council, and a breeding school run by the U. S. Department of Agriculture. The school, the first of its kind at the show, consisted of lectures on breeding and a group of 12 cows to prove, by their history and records, the points brought out by R. R. Graves of the Department, who did the talking. Other exhibits stressed the value of milk in the diet, while commercial displays showed how to keep cows comfortable and profitable.

(Continued on page 18)



Ten cows to illustrate Ayrshire type, quality and milk-producing ability were shown by the Ayrshire Breeders' Association at the National Dairy Exposition. They were collected from Strathglass Farm, Port Arthur, N. Y., Sycamore Farm, Douglassville, Pa., Penshurst Farm, Narberth, Pa., and Nesheim Farm, Newtown, Pa. Their average annual production was 12,800 pounds of milk and 321 pounds of butterfat.

It is impossible to describe the whole Exposition. In fact one pair of eyes can't see it all. The judging arena, which accommodates four classes at once, offers more than one person can take in. Then there is the horse show each night with \$25,000 in prize money in addition to cups, medals and ribbons. Nearly 500 of the finest saddle horses in America flashed around the arena to the delight of the thousands who have paid with none of their love for horse flesh in this gasoline age. According to a saddlery company official interest in horse-back riding has increased more in the last three years than in the preceding 25, and more people now ride horses for pleasure than in the horse-and-buggy days.

Bloodless Combat

As in the old Roman coliseum the modern livestock arena is a battle ground for the participants and a colorful spectacle for the populace, but the most pessimistic must admit that the human race is improving when it enjoys the present bloodless combat as the ancients did their glory shows. The flashy grace of the Ayrshires and the delicate beauty of the Jerseys draw admiring comments from the urban cliff-dwellers, who are not supposed to know a cow from a cucumber. But they have their opinions and preferences. To some the tawny Guernseys are the most appealing, while others are captivated by the unusual somber Brown Swiss. And the sedate Holsteins, with only black and white at their disposal, when in mass formation present them in a most brilliant manner.

The Cattle Show

The Ayrshire show was light this year, but of excellent quality. A Pennsylvania concern, Sycamore Farms of Douglassville, took the majority of leading places. The Jerseys as usual presented a magnificent show both in number and quality. Blonde's Cuning Mouse, grand champion Jersey cow at Detroit in 1926, staged a comeback and took the grand championship again this year for John S. Ellsworth, Simsbury, Conn. Twin Oaks Farm of New Jersey maintained its tradition of showing the grand champion bull, this time on the stylish and substantial February Fern's Noble. The Guernseys, which have improved much in uniformity of type in recent years, staged a show of very high average quality. Fernbrook King Hendrick, owned by Gayhead Guernsey Farms, Coxsackie, N. Y., was made grand champion bull, while Moose Valley Minuet won highest place among the females for Boulder Bridge Farm, Excelsior, Minn.

Well over a hundred Brown Swiss made an impressive show of this sturdy breed. Other things being equal animals of orthodox dairy type went to the head of the class, indicating that the breed is committed to the dairy rather than the dual-purpose.

In Holland and Germany

By H. C. KNADEL

A TRIP of poultry-minded folks through the Netherlands would not be complete without a visit to Barneveld—the home of the Barneveld fowl. This fowl lays an unusually large egg of the deepest rich brown color. Barneveld is also noted for the fact that it is the largest poultry market in the world. The day we were there 50,000 fowls had been sold. Not only is poultry marketed but fruit, vegetables and other livestock are well. Live pigs in pairs are brought into the market in large wicker baskets. There they lie until a bidder arrives. Later he may be seen strutting down the street with a pig over each shoulder.

We left Coblenz by steamer for Mainz. Words cannot express the exquisite beauty of this trip. On both sides of the river steep banks rise to several hundred feet. On these high peaks castles built centuries ago for protection rise in magnificent splendor. And then for miles and miles down the river's edge to the top of the hillsides are to be seen terraces which hold in place the soil for the production of thousands of acres of grapes. Every few feet up these hillsides stone walls are constructed and behind these are vineyards beyond count. The day was ideal, the boat trip most pleasant, the dinner on the boat was all that German cooking implies. I recommend to you never again when in Germany, to take the trip up the Rhine, for you will never regret it.

We felt sorry for the city of Mainz, because it has been "in hot water" for centuries. Napoleon the first, who had headquarters in the city for some 14 years, once used the magnificent cathedral as a stable for his horses. This building was constructed in 975 and contains ten beautiful paintings of a religious nature. The architecture is Roman and Gothic. We visited another building in which Napoleon lived for 14 years, Hindenburg for three days and the French officers in the recent Army of Occupation for 12 years.

In the beautiful residential section some 400 homes were constructed by the Germans for the French officers in the Army of Occupation. All these homes are now for sale, but there are no buyers. During the World War the city was bombed six times. In this charming city can be seen the old Roman wall built in 6 B. C. and the German walls constructed in the 14th century. It should also be recalled that it was in Mainz that the first newspaper was printed by Gutenberg.

From Mainz, we left by special train for Oberammergau. The scenery along the route is most beautiful. Germany is certainly making rapid strides in reforestation. Great tracts of unutilized soil are being used for this purpose. We observed oxen plowing and women in the fields working late in the evening. What American machinery would do on many of these farms! But great large tracts of land, in which tractors would perform the work so much more quickly, are owned by several farmers. Each plows and harrows his little strip, and so there was not an uncommon sight to see a acre or two of wheat belonging to the farmer and adjoining this an acre or so owned by another. For generations this land has been in their respective families and no effort is made to cooperate in the purchase of up-to-date equipment in order to increase the cost of production. Of course, in some localities modern agricultural machinery is used and to very good advantage. From the train's windows, we could see the hillsides terraced, but less extensively than on the Rhine.



Wins County Egg Laying Contest

"Fed on BULL BRAND, Lester Waldron's 250 birds lay 5,818 eggs in month" says Uncle Charlie



and B-B Scratch Feeds are guaranteed to give more eggs or money back.



combines in one mash all ingredients needed for baby chicks.



combines in one mash all ingredients needed for growing birds.



24% Dairy Ration, 20% Hi-Test, 16% Marmico. A Protein content suitable for every grade of roughage.



The Home of the Feed that's Guaranteed

FALL CHICKS AND DUCKLINGS
of best quality. Postage paid and insured. Guaranteed. Fall chicks and ducklings are best for profitable broilers. Winter nest and young eggs. Buy now and reap the profits. Mail order. Poultry 2-2. KRKAUR POULTRY CO., Inc., West Washington Market, New York City.

NABOB POULTRY FARM, Box 22, GAMBIER, OHIO

Navy Brand Concentrated Buttermilk
From Tuberculin Tested Cows
28 per cent milk solids, 6 per cent lactic acid, thick as custard with no foreign ingredients. Reduces top-dressing and lessens danger from coccidiosis. Increases egg production and promotes fertility and hatchability. Good for chicks, broilers and laying hens. Sold direct from the factory in barrels of about 45 lbs. Half barrels, about 20 lbs. White for prices.

TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, PA.

BROILER—RAISERS
SHIPPING CRATES LOANED FREE
SHIP YOUR LIVE BROILERS and other poultry to New York's Oldest Live Poultry House. Est. 1883. We are bonded commission merchants. Birds fed returns made, daily. Highest prices. Our outfit is unlimited. Inquire about us. Write for quotations, prices, tags, shipping instructions. Holiday Catalogue. Poultry 2-2. KRKAUR POULTRY CO., Inc., West Washington Market, New York City.

White Wyandottes—all ages. A.P.A. Certified. Disease free. Large type. Heavy layers. 1470 eggs. We have specialized in this breed for 30 years. Catalogue free. Sherman Bowden, Ex. 195B, Mansfield, O.

"Pure-bred" BARRED ROCK CHICKS
\$9 per 100; \$85 per 1,000; Heavy Mixed, \$8 per 100. Prompt Service. C.O.D. 100% live delivery guaranteed. CHAS. F. EWING, R. 1, McClure, Pa.

ULSH'S Superior Chicks
White Wyandottes, White Rocks and Barred Rocks. Write for Fall & Winter prices. Hatches weekly the year around. 1935 live delivery guaranteed. Postage paid. JAS. E. ULSH, Box P, Beaver Springs, Pa.

QUALITY CHICKS
Barred Rocks \$2.00 per 100
Heavy Mixed \$1.00 per 100
Attractive prices on 3 & 4 week old chicks. C.O.D. Postage paid. 1935 live arrival.
J. A. Baumgardner, Beaver Springs, Pa.

WHITE LEGHORN CHICKS
Fertile and Hatched Strains
Order now for Feb., March & April. Price \$110-1.00. Send for catalogue—it's free. Tells about our great egg producing Leghorns.
JUNIATA POULTRY FARM, Box 2, Richfield, Pa.

When writing advertisers please mention Pennsylvania Farmer

Farmer's Business Letter

THE business situation fails to show much change. The news is full of appeals for relief for the unemployed and of plans for such work during the coming winter, and this coupled with continued adverse stock market reports only emphasizes depression and holds in check any optimism that might be inspired by talk, or even by scattering reports of actual improvement. Thus a better feeling has a difficult time getting under way, and the experts tell us that until such better feeling comes it is hopeless to expect "business as usual."

All this has a direct relation to the farmer's business and to farm markets. As to the latter they have reflected this week the prevailing price uncertainty, being mainly on the weak side, with abnormalities, of a minor nature, almost on every hand. In other words, there is no logical way to explain some things that happen from day to day, and by the same token probably never before was the "talent" so generally at sea as to the future, with respect to any farm commodity that might be named.

So far October has been unusually warm in this part of the country, with rains enough to assure some fall grass that will help out on the winter's feeding. Colder now.

Light Hog Runs

The hog market did fairly well this week, but apparently only because receipts were light. With the winter packing season only a couple of weeks away the trade is beginning to wonder where the hogs are to come from. Eleven markets had 409,000 hogs this week, against 467,000 last week and 524,000 a year ago. Not only was the run light but the hogs were light in weight, the average being 231 pounds, lightest since last March. Average price for the week was \$9.50, which was 15c under last week and 5c under a year ago. In the weight of hogs the short corn crop is beginning to show, as some expect it to all winter. For the same reason demand for weight has been running strong, packing sows gaining in price materially this week, a little more activity was evidenced in the hog futures market this week, at a price range from 5 to 20c under last week. Both light and medium weights sold at \$8.90 for January delivery, with heavies at \$8.80 for December. The buyers of these options of course expect hogs to be higher when the time comes for settlement, and the sellers expect them to be lower.

Lambs Sell Lower

Lambs worked higher at the week-end, but most of the week it was a low, slow market in spite of lighter runs at the leading points. Average price for the week on lambs was \$7.55, 50c below last week and only 25c above the lowest time since 1913. The average was \$5.25 under a year ago. The immediate prospect is a little brighter, but it is not expected that there can be any sustained improvement for some weeks. Sheep were lower this week, but the feeder market held up well and quotations were 25c up. Demand in the feeder division was very good, and a good many orders are on hand for first quality light lambs at \$7.75. Others sold down to \$6, as to weight and quality.

Steer Trade Near Steady

Receipts of cattle at leading points were about the same as last week, and while trade was in spots rather slow prices in the market held up well, the average steer price here, at \$10.75, being only 5c under last week. Particularly, demand for the plain stuff was better than for the good to choice kinds, even though this is the range season when the opposite is commonly true. Top heavies brought \$12.50 and yearlings \$13.25, each a dime under the previous week. Only about 600 steers were recorded as selling at \$12.75 and up this week, against over 1,200 last week. Average price of steers for the week was figured at \$10.75. Feeder demand was slow and supply scarce. The market was weak at the close, with bulk of trade at \$7.75, fancy stuff up to \$9, and for something extra even higher.

Grains Dull

In the grain markets dullness continues to prevail. Wheat and corn both moved a little higher the fore part of the week but declined later. They closed about a cent above the opening

of the week. But there is no confidence on either side of the market, and trade is merely marking time pending developments that indicate a definite trend one way or the other. Reports from the country become more and more conclusive regarding wheat feeding, and it is generally recognized now that a lot of wheat will thus be accounted for, some say enough to wipe out the surplus and put our market on a domestic basis. If this is true there should be an upward movement one of these days. Quite a variation in country elevator prices is shown, presumably on account of feeding demand prevailing in some places and not in others.

Chicago, Oct. 13, 1930. Watson

Produce Market

POTATO prices gradually declined during the week in most city markets and trading was only moderate. The trade is buying on a hand-to-mouth basis and track holdings have increased at many markets. Dealers find it difficult to buy potatoes at country points at a price that will net them a profit.

Pennsylvania round whites of fair quality sold mostly at \$1.60-1.65 per 100-pound sack in Philadelphia. Well-graded Pennsylvania potatoes of good quality are scarce and brought \$2 and better in a jobbing way. Maine Green Mountains sold at \$1.85-1.90 per 100-pound sack.

The harvesting of the New Jersey cranberry crop was practically completed this past week and the fruit is stored. Early reports indicate that the crop will be considerably larger than last year. The late harvested fruit was of good quality and highly colored, but some of the earlier fruit did not have as much color as the trade desires. Shipments so far have been light and the warm weather has been unfavorable. Massachusetts stock has been selling slowly at \$2.25-2.35 per quarter barrel crate in New York.

LIVESTOCK

PITTSBURGH

Cattle

Forty carloads made up Monday's supply of cattle at Pittsburgh. Trade was fairly active, especially on the better grades, and prices were generally steady to a quarter higher. Good steers were relatively scarce and this kind met ready sale at 25c over last week's prices. One lot of fat but not fancy cattle in the 1,300-lb. class brought \$9.25, while a load of 1,157-lb. steers went at the same figure. Individual fed yearlings sold up to \$9.50, but \$9.25 was top on carload lots. Good to choice weighty steers sold around \$8.75 with fair kind around \$8. Good butchers' steers were also stronger at \$8.75-8.80, according to finish. Fair butcher cattle were about steady at \$7.50-7.65, while ordinary to common sort were slow to easier. Common and medium light steers were about steady at \$6.25-6.47 and inferior kind lower if anything, this kind selling mostly at \$5.6-5.75. Few fancy heifers were offered. Medium kinds were plentiful and went largely at steady prices, \$6.25-6.47 for the better ones and \$5.50-6.50 for fair sort. Pair to good fat cows brought \$4.6-5.25 with no choice kind offered. Bulls were rather slow at steady prices and sold on the basis of \$6.50-6.97 for choice handy bulls and \$5.5-5.25 for most bolognas.

Choice grain-fed steers None here
Choice steers \$9.00-9.25
Good to choice, 1,200 lbs. 8.50-9.00
or over 8.50-9.00
Fair to good, do. 7.75-8.50
Plain heavy steers 7.25-7.50
Choice handy-weight steers 8.50-8.75
Good butcher steers, 1,000 to 1,150 lbs. 8.25-8.50
Fair to good, do. 7.75-8.25
Ordinary to fair, do. 7.00-7.50
Common, do. 6.00-6.50
Good light butcher steers 7.75-8.25
Fair to good light steers 7.25-7.75
Common to medium, do. 6.00-6.50
Inferior light steers 6.00-6.50
Feeders Nominal
Stoekers Nominal
Choice fat heifers 7.25-7.50
Good to choice heifers 6.75-7.25
Fair to good heifers 6.25-6.75
Common to fair heifers 5.00-6.00
Choice fat cows 5.00-6.00
Good to choice fat cows 4.25-5.00
Fair to good cows 3.50-4.00
Common to fair cows 3.50-4.00
Fresh cows, cull at side 2.50-3.00
Choice heavy bulls 6.25-6.50
Choice handy butcher bulls 6.50-7.00
Good handy bulls 6.00-6.50
Fair to good bulls 5.50-6.00
Common to fair bulls 4.00-5.00
Inferior bulls 4.00-5.00

Forest fires in Atlantic county have destroyed several hundred acres of bog and it is likely that many of them will have to be replanted. The fruit had been harvested, but the bogs had not been flooded.

Apples Slow

The mild weather was unfavorable to the apple market and the demand continued very slow. Prices continue to show a wide range due to the variation in the quality and pack of the stock offered. Poor to fair stock which made up the majority of the offerings in both Philadelphia and New York ranged from 25-75c per bushel. Good stock brought 85c-1.25 and fancy stock sold at \$1.35-1.50. In New York there were extra fancy lots of Delicious, Fall Pippin, McIntosh and Twenty Ounce that brought \$1.75.

The sweet potato markets were dull and weak and even fancy New Jersey stock sold slowly. Yellow and red varieties sold around 60-75c per bushel in Philadelphia, although some extra fancy lots brought somewhat higher prices. Swedesboro section sweets brought \$1.175 per bushel with extra fancy wrapped stock selling at \$2. Poorer lots from other sections sold as low as 50c.

Eggs Close Firm

The Philadelphia egg market was lower during the early part of the week but was firm at the close. Fancy grades of nearby and western eggs were in good demand and sold readily. Other grades held about steady. Receipts of white eggs of good quality trade requirements were scarce. Graded nearby whites sold at 35-40c per dozen during the latter part of the week, while the best white henery eggs brought 41-50c. Mixed colors brought 31-34c and ordinary firsts 27-30c. Fresh western eggs sold at 30-36c, with ordinary stock as low as 26c. Storage eggs were quiet with prices showing but little change.

New York reported a decline of about 7c a dozen on top quality white eggs early in the week but prices held steady at the lower levels. Nearby henery whites sold at 22-25c a dozen

Hogs

Thirty-two carloads made up the supply of hogs. The market was active at prices steady to a dime under the close of last week. Most handy and heavy weights sold freely on a \$10.50 basis, the range being \$10.45-10.50. Not many heavy hogs were on sale and they went along with the medium and heavy Yorkers without sorting. Most lights and pigs went at \$10.10-10.25 with sows at \$9.

Heavy \$10.25-10.50
Medium weight, 125-150 lbs. 10.45-10.50
Light Yorkers, 125-150 lbs. 10.00-10.25
Pigs, 80-100 lbs. 10.00-10.25
Roughs 8.75-9.00
Sows 5.00-6.00

Sheep and Lambs

The 12 carloads consisted mostly of lambs, which were a half dollar higher, best fat lambs bringing \$9. The culls to medium sort went largely at \$5.75. Sheep were also higher, best wethers being quoted at \$4.50. Other sheep range, according to grade, down to a dollar for inferior kind.

Good to best wethers \$4.00-4.50
Good mixed, do. 3.50-4.00
Medium weight, 125-150 lbs. 10.45-10.50
Fair to good, do. 10.00-10.25
Common to fair 2.00-2.50
Inferior sheep 1.00-2.00
Good to choice lambs 8.75-9.00
Medium, do. 7.00-8.00
Culls and common, do. 5.00-6.50

Calves

With 500 calves on sale the market was 50c higher. Choice vealers brought \$14.40-14.50. Seconds went at \$10-12 with heavy and thin calves around \$5.50-8.

LANCASTER

Cattle

Lancaster, Oct. 20.—Receipts totaled 2,550 head. Market active and 25-50c higher. Bulk of sales was at \$7.50-8.25.

With 75 calves on sale the market was steady, best vealers bringing \$14 per cwt.

CHICAGO

Cattle

Chicago, Oct. 20.—Receipts amounted to 26,000 head. The market was steady to 25c lower. Yearlings are quoted at \$8.50-13.25; heavy steers, \$7.75-12.50.

Hogs

About 60,000 hogs, including 17,000 "dressed," were on hand. The market was generally 10-20c lower; sows, 30-40c lower. Best hogs sold at \$9.70-10.05.

Sheep

With 25,000 sheep and lambs on sale the market was 25-50c higher. Best lambs sold at \$8.75-9.

depending on grade, while brown eggs brought 29-37c. Mixed colors sold at 18-30c and Pacific Coast white eggs at \$1-54c.

Butter Steady

Top grades of butter held steady in Eastern markets during the week but the medium and under grades were somewhat lower. Trading in fancy butter was fairly active but the lower grades were draggy. Holdings of butter in cold storage on October 20th were estimated at 130,753,000 pounds as compared with 158,541,000 pounds the same date a year ago. Figure shows that the holdings were 3,551,000 pounds below the average holdings on that date for the past five years.

Leghorn fowls sold at 14-15c per pound, colored fowls at 21-25c, Red chickens at 22-25c, Reds at 18-21c and Leghorns at 16-18c.

Dressed poultry was in moderate supply and prices held steady under slow demand. Broilers sold at 25-34c per pound, chickens at 24-30c, and fowl at 20-30c.

NEW YORK MILK PRICES

Dairymen's League

ANNOUNCEMENT of a net pool price of \$2.64 for milk delivered to members during September was made through the Dairymen's League New York official organ of the Dairymen's League Cooperative Association. This is a 30 cent per 100 pounds increase above the basic net pool price for August. The prices quoted are base prices for milk testing 3.5 butterfat delivered at the 200-210 mile zone.

Sheffield

THE net cash price to be paid to members of the Sheffield Producers' Cooperative Association, Inc., for the milk sold by them in the month of September, 1930, is \$2.56 per hundred pounds for 3 per cent Grade B milk in the 201-210 mile zone with the usual freight, grade and butterfat differentials. This is equivalent to \$2.56 per hundred pounds for milk sold on the 3.5 per cent butterfat basis. It is an increase of 32 cents per hundred pounds over the August price, 64 cents over the July price and 72 cents over the June price.

PITTSBURGH MILK PRICES

The Dairymen's Cooperative Sales Company ruled that dealers' buying prices for milk delivered during October will be \$2.75 per cwt. for Class I, Pittsburgh country plant, and \$1.85 for Class II. Direct shippers will be \$3.40 for Class I and \$2.40 for Class II. Class II direct shippers will be 15 per cent above 92 score extras on the Chicago market, plus 35c; country plant, Class III, the same as above, plus no plus.

Pittsburgh retail prices will be 16c a quart and 30c a pint.

COMING EVENTS

Oct. 29-31.—Apple and Potato Show, Pittsburgh, Chamber of Commerce.
Nov. 6-7.—W. Va. Dairymen's Assn. annual meeting, Mountaineer, W. Va.
Nov. 6-8.—National Cooperative Milk Producers' Federation, Des Moines, Iowa.
Nov. 12-21.—Annual convention of National Grange, Rochester, N. Y.
Nov. 15-18.—American Royal Livestock Show, Kansas City, Mo.
Nov. 19-27.—Royal Winter Fair, Toronto, Canada.
Nov. 20-22.—Fifth Annual Conference of Farmers' Cooperative Associations, State College, Pa.
Nov. 29-Dec. 6.—International Livestock Exposition, Chicago, Ill.
Dec. 2.—American Institute of Cooperation—mid-winter meeting—Chicago, Ill.
Dec. 3-7.—Chicago Cattle Show, Exposition, Chicago, Ill.
Dec. 8-10.—Twelfth Annual Convention of the A. F. B. F. at Boston.
Dec. 9-11.—Pennsylvania State Grange, Pottsville, Pa.
Jan. 18-24.—Farm Products Show, Harrisburg, Pa.

CHICAGO POULTRY EXPOSITION

With entries closing November 12th, the Chicago Poultry Exposition, reorganized from the 21-year-old Cattle and Poultry Show, is fast rounding into shape for December 3-7.

Twenty-five Specialty Clubs and National Poultry Associations are holding their meets here, such as the National Poultry Council, The International Baby Chick Association, The American National Poultry Association, and the International Turkey Association.

Judges handling the poultry, turkeys, ducks and geese departments include Messrs. Ashfeld, Atkins, Conway, Delano, Graham, Hackett, Hale, Hobbs, Kriner, Krum, McClave, McCord, Otte, Schilling, Stauffer, Stout, Walker, Wolsieffer and Young.

In writing for premium list to Secretary Harvey C. Wood, Room 1900, 141 West Jackson Blvd., Chicago, please state whether you want one for Poultry, Rabbits, Pigeon, or Fox and Fur Exhibit.

Produce Quotations

PHILADELPHIA

Butter.—Higher than extras, 42-45c; 92 score, 41c; 90 score, 37c.
Eggs.—Fancy select, 35-45c; extra firsts, 30-35c; second, 20-22c.
Poultry.—Live fowls, 14-28c; broilers, 15-20c; old roosters, 15-18c; pigeons, pr. 25-30c; ducks, 15-18c; turkeys, 25-32c.
Fruits.—APPLES, N. J. & Pa. bskts., 40-60c; varieties, 40-60c. PEARS, N. J., bskts., 30-60c. CHESTNUTS, N. J. & Pa. per lb., 5-12c.
Vegetables.—BEANS (snap), N. J., % bskts., 15-25c. KALE, Pa. bus., 1-2c. % bskts., 1-2c. BEETS, N. J. & Pa. per bunch, 1-2c. CARROTS, N. J. & Pa. per bunch, 1-2c. CELERY, N. J. hearts, per bunch, 2-3c. CORN, Pa. 1-2 sacks per 100 ears, 1-2c. CABBAGE, N. J. & Pa., % bskts., 25-40c. EGG PLANT, Pa. bus., 40c. LETTUCE, N. J., crates, Big Boston, 75-85c. PARSLEY, Pa. & N. J., bunches, curly, 75-85c. PUMPKINS, N. J. & Pa., 10-15c. PEPPERS, N. J., % bskts., 15-25c. RADISHES, N. J., bus. washed, red, 50c. SPINACH, N. J. & Pa. bus., 50-75c. SQUASH, N. J., % bskts., white, 75c. TOMATOES, N. J. & Pa., % bskts., 40-75c. POTATOES, N. J. & Pa., 100-lb. sacks, 1-1.75. SWEET POTATOES, N. J., % bskts., red and yellows, No. 1's, 60-75c.

LANCASTER

Butter.—Country butter, 45-50c; creamery butter, 47-50c.
Eggs.—Fresh, 50-55c.
Dressed poultry.—Chickens, \$1.25 @ 2 each; springers, 75-85c each; ducks, 1-2 each; squabs, 25-30c each.
Fruits.—APPLES, 15-25c. % pk. PEACHES, 25-30c qt. GRAPES, 5-8c lb. WATERS, 20-25c qt.
Vegetables.—BEANS (string), 20-25c. % pk. BEANS (lima), 25-30c pint box. BEETS, 5-10c bunch. CABBAGE, 8-15c head. CARROTS, 8-10c bunch. CAULIFLOWER, 10-15c head. CELERY, 8-15c bunch. CUCUMBERS, 5-10c each. EGGS, 10-15c each. ENDIVE, 5-8c bunch. LETTUCE, 8-15c head. ONIONS, 10-15c pk. POTATOES, 15-20c % pk. SWEET POTATOES, 10-15c pk. PEPPERS, 25-30c each. PARSLEY, 5-8c bunch. PEAS, 30-35c % pk. RADISHES, 10-15c pk. SPINACH, 12-15c pk. TOMATOES, 10-15c pk. TURNIPS, 5-8c pk. CORN, sweet, 25-30c doz. KISHROOMS, 25-30c pt.

NEW YORK

Butter.—Higher than extras, 40-45c; 92 score, 37-40c; 90 score, 34-37c; 88 score, 31-34c.
Eggs.—White, nearby and nearby western, selected extras, 52-55c; extra firsts, 48-50c; second extras, 45-48c; mediums, 40-45c.
Poultry.—Live, by freight, fowls, 15-24c; broilers, 16-18c; pullets, 23c; old roosters, 15-18c; ducks, 18-21c; geese, 10-15c; turkeys, 25-30c.
Fruits.—APPLES, bskts., N & E, near and varied varieties, 25-30c. CRABAPPLES, 10-15c. % bskts., 15-25c. PEACHES, 25-30c. % pk. LIMA BEANS, 20-30c pk. TOMATOES, 10-15c % pk. PEPPERS, 25-30c. SAUERKRAUT, 20c qt.

Butter.—Higher than extras, 40-45c; 92 score, 37-40c; 90 score, 34-37c; 88 score, 31-34c.
Eggs.—White, nearby and nearby western, selected extras, 52-55c; extra firsts, 48-50c; second extras, 45-48c; mediums, 40-45c.

Poultry.—Live, by freight, fowls, 15-24c; broilers, 16-18c; pullets, 23c; old roosters, 15-18c; ducks, 18-21c; geese, 10-15c; turkeys, 25-30c.

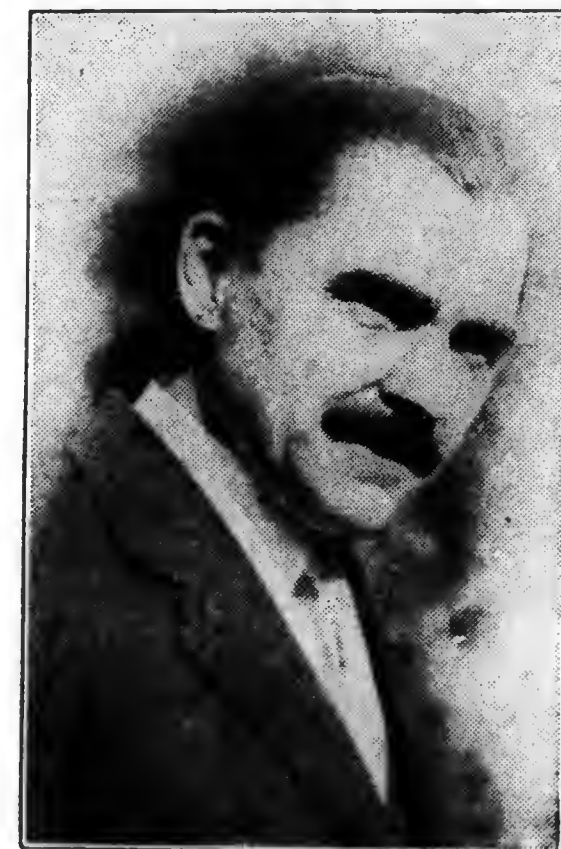
Fruits.—APPLES, bskts., N & E, near and varied varieties, 25-30c. CRABAPPLES, 10-15c. % bskts., 15-25c. PEACHES, 25-30c. % pk. LIMA BEANS, 20-30c pk. TOMATOES, 10-15c % pk. PEPPERS, 25-30c. SAUERKRAUT, 20c qt.

Butter.—Higher than extras, 40-45c; 92 score, 37-40c; 90 score, 34-37c; 88 score, 31-34c.

Poultry.—Live, by freight, fowls, 15-24c; broilers, 16-18c; pullets, 23c; old roosters, 15-18c; ducks, 18-21c; geese, 10-15c; turkeys, 25-30c.

Fruits.—APPLES, bskts., N & E, near and varied varieties, 25-30c. CRABAPPLES, 10-15c. % bskts., 15-25c. PEACHES, 25-30c. % pk. LIMA BEANS, 20-30c pk. TOMATOES, 10-15c % pk. PEPPERS, 25-30c. SAUERKRAUT, 20c qt.

STABILIZE EMPLOYMENT



VOTE
for

HEMPHILL FOR GOVERNOR

WAGE earners and employers agree that business conditions require a sane, conservative and constructive leadership in public office. Gifford Pinchot is a spokesman of an unsound and dangerous demagoguery. The best contribution that can be made at this time to the promotion and stabilization of employment and industry and the safeguarding of public welfare is the election of John M. Hemphill to the office of Governor of Pennsylvania.

Pinchot has proven himself a prodigious promiser. Hemphill is a conservative, sure leader who performs more than he promises.

ELECTION DAY-TUESDAY, NOV. 4th

Be Sure to Vote!

(Advertisement)

Make repairs for winter with-

DEVCO PAINTS and Roof Coatings

ASBESTOS
Red Coatings
Heavy Liquid
1 Gal. \$ 0.50
5 Gal. 2.45
30 Gal. 10.45

Black Asphalt
Roof Paint
For Wood or
Metal Surfaces
1 Gal. \$ 0.45
5 Gal. 2.25
30 Gal. 10.45

Full Line of
Shingles and
Roll Roofing
All prices F.O.B. Phila. Send Check or Money Order

BUILDERS' HARDWARE and TOOLS
Complete stock of high grade trade-marked hardware and tools at lowest prices. Devitt's, one of the largest houses of its kind, is always ready to ship at once. Send us your list for quotations. We then compare our prices. Send for Free Catalog

DEVITT'S
ESTABLISHED SINCE 1891
138 Washington Ave., Phila., Pa.

CRAWFORD COUNTY, PENNA.

—Clean Disease Free Cows—

When Crawford County was first noted in 1922 less than 5% infection was found. It has since been reduced to less than 1-10 of the basis of the last test. Springers and fresh cows are included in this amount at reasonable prices. Let us know what you are in need. We will quote actual prices. Our services are free.

Crawford Co. Cooperative Dairy Improvement & Sales Ass'n. Market House, Meadville, Pa.

DAIRY CATTLE

For Sale Two dairy registered Jersey bull calves, will be one year old in Feb. Also several heifers, one bred, and young cows. See my exhibit in the market. **HERBERT E. ATHEY**, Meadville, Pa.

Registered Jerseys Bred heifers and importers, both sexes, of best breeding. **D. J. KENZIE**, Meadville, Pa.

AYRESHIRE CATTLE of the best blood lines. Herd T. H. Accredited. Animals of both sexes and all ages. **Geo. B. McCannell**, Wellington, Ohio.

For Sale High-grade Holstein springers, car, glaner & Bringer. **West Concord, Minn.**

FOR SALE—Purchased Holstein cows, due to freedom this fall. Young bulls, bred and registered. **Gilroy Bros., Ulster, Bradford Co., Pa.**

SWINE

Chester White Pigs—8 weeks old, \$4.00. For breeding \$6.00 each. Mixed bred pigs, \$2.50. **C. LEWIS TAYLOR**, Wyandotte, Pa.

ANNUAL SALE of quality Chester White Hogs. Oct. 30, 1930. Hogs bought on mail bill will be shipped on approval. C.O.D. Hogs to 10 lbs. **A. H. CROWNOVER**, Mt. Sterling, Ohio.

125 BIG TYPE pedigree Chester Whites from big breeders and big litters. Priced right and shipped on approval. **C. E. Cassel, Hershey, Pa.**

Feeding Pigs 15 to 50 lbs. \$4.50 to \$5.00 according to size. Truck delivery on large lots. Mostly Poland-Chinas. **Stanley Short, Cheswick, Pa.**

HAMPSHIRE PIGS Eight weeks old, both sex, free, bred right, ready for service. **A. M. Kennel, R. 2, Honey Brook, Pa.**

BIG TYPE POLAND-CHINAS—Pigs from large registered sows. Nine ones at low prices. **G. S. HALL**, Farmdale, Ohio.

For Sale: 100 Six Week Pigs \$3.50 Each **INDIAN COON HOG FARMS**, Dushore, Pa.

LARGE BERKSHIRES all ages of usually for sale. **Ditts & German, Roseville, Ohio**

FEED for GREATER PROFIT DRIED MOLASSES BEET PULP

Dried Molasses Beet Pulp gets more milk from dairy cows—faster, more economical gains from beef cattle and sheep. **No other feed can do the same work for you.** Dried Molasses Beet Pulp is a vegetable feed—the only one of its kind distributed commercially!

Dried Molasses Beet Pulp strengthens the animal's constitution—adds variety to the ration and **aids the digestion of other foods**—regulates the bowels and eliminates those "off-feed" days. There's nothing better for profitable milk production.

PRICES LOW

Dried Molasses Beet Pulp is always profitable to feed but with present low prices it is the most economical and profitable supplemental feed to be obtained. Dairy men and feeders are using it in great quantities—see your dealer and get started on Dried Molasses Beet Pulp—your profits will increase.

Write for free booklet "Profitable Feeding"
THE LARROWE MILLING COMPANY
Dept. P. F. 2 Detroit, Mich.

National Dairy Exposition

(Continued from page 14.)

type. However, these cattle still have plenty of substance. March Molly 3rd's Master, owned by J. P. Allyn, Delavan, Wis., was grand champion bull and King's Peblebrook Phyllis Tassel, The Hull Bros., Painesville, Ohio, grand champion cow. The latter won similar place in 1929.

Holsteins led in numbers and put on a show worthy of this grand old breed. Grand championships were as follows: bull, Sir Fobes Ormsby Hengerveld (fifth time grand champion), owned by Elmwood Farm, Deerfield, Ill.; cow, Miss Lassie Ormsby, owned by C. E. Griffith, Big Cabin, Okla.

AYRESHIRE

Judges—John Cochran, Bernardsville, N. J., and E. W. Van Tassel, Wenatchee, Wash.

Bull calf—1, Alta Crest Rainy day, shown by Alta Crest Farms, Spencer, Mass.; 2, Alta Crest Rain or Shine, Alta Crest Farms; 3, Alta Crest Gay Day, Alta Crest Farms; 4 and 5, Sycamore Farms, Douglassville, Pa.

Bull, 18 months and under 2 years—1, Strathglass Dalbar, Sycamore Farms; 2, Fair Field's Admiral, Fair field Farm, Topeka, Kans.; 3, Alta Crest Highwayman, Alta Crest Farms; 4, Sycamore Farms; 5, J. J. Lynes & Sons, Plainfield, Iowa.

Bull, 2 years and under 3—1, Wilcox Satisfaction, Alta Crest Farms; 2, Fair Field's Battle Axe, Fairfield Farm; 3, Bully Boy of Plainfield, J. J. Lynes & Sons.

Bull, 3 years and under 4—1, Penhurst Advancer, Sycamore Farms; 2, Strathglass Craig Star, Fairfield Farm; 3, Penhurst War Laird, F. H. Baskins, Cedar Falls, Ia.; 4, Alta Crest Farm; 5, Sycamore Farms; 6, Landlord's Sheba, J. J. Lynes & Sons; 7, Sycamore Lorada, Sycamore Farms; 8, Sycamore Farms; 9, Alta Crest Farms.

Bull, 4 years and over—1, Bermuda Westford Noble, Crive Hall Farms; 2, Cedarline Golden Sultan, Elm Hill Farm, Brookfield, Mass.; 3, Cowslip's Look Here, Hugh W. Bonnell, Youngstown, Ohio; 4, Riverby Farms, Grafton, Wis.; 5, Twin Oaks Farm, Heifer calf—1, Design's Queen Onyx, Crive Hall Farms; 2, Golden Brookdale, Gala, Maryvale Farms; 3, Volunteer's Rosebay Bertha, Elm Hill Farm; 4, Pebble Hill Plantation; 5, Maryvale Farms.

Heifer, 1 year and under 18 months—1, Palatine's Baby, The Oaklands; 2, Design's Geneva, Crive Hall Farms; 3, Cedarline's Golden Miss, Elm Hill Farm; 4, Breezy Hill Farm; 5, Wegman Hill Farm, Hamilton, Ohio.

Heifer, 18 months and under 2 years—1, Bermuda's Pansy, Crive Hall Farms; 2, Pebble Hill's Bright Maiden, Pebble Hill Plantation; 3, Primate's Prima; 4, D. Madding, Bridgeport, Ill.; 5, Hugh W. Bonnell, 5, Longview Farm, Lee Summit's, Mo.

Heifer, 2 years and under 3—1, Brampston Standard Sybil, R. H. Crosby, Hay, Miss.; 2, Imported Last Chance, P. I. Harrison, Elkton, Md.; 3, Westford's Champion Folly, Annapurna Rancho; 4, Crive Hall Farm; 5, D. Madding.

Cows, 3 years and under 4—1, Volteer's R. R. Bain, Palms, Calif.; 2, Volunteer's Master Maid, Taft Ranch Jersey Farms, Taft, Calif.; 3, Vivienne, J. D. Madding; 4, Crive Hall Farms; 5, Hugh W. Bonnell.

Cow, 4 years and over—1, Dreaming Sarna's Gold, J. D. Madding; 2, Palatine's Vera Leigh, Annapurna Rancho; 3, R. R. Bain, Palms, Calif.; 4, Breezy Hill Farm; 5, Breezy Hill Farm.

Bull, 1 year and under 18 months—1, Golden Cord Prince, J. J. Lynes & Sons, Plainfield, Iowa; 2, Alta Crest Nevertell, Alta Crest Farms, Spencer, Mass.; 3, Sycamore Farms; 4, J. J. Lynes & Sons; 5, Fairfield Farm.

Bull, 2 years and under 3—1, Betty's Sons of Sevilla of Old Forge, Sycamore Farms; 2, Woronack White Mamie, Alta Crest Farms; 3, Fair Field's Spicy Girl, Fairfield Farm; 4, J. J. Lynes & Sons; 5, Fairfield Farm.

Cow, 3 years and over—1, Thirdpart Madge 4th, Sycamore Farms; 2, Cacapon Lass, Fairfield Farm; 3, Penhurst Pretty Pearl, Sycamore Farms; 4, Alta Crest Farm; 5, Wendel C. Wicks, Oxbow, N. Y.

Senior and grand champion bull—Willowton Satisfaction, Alta Crest Farms.

Senior and grand champion cow—Thirdpart Madge 4th, Sycamore Farms.

Junior champion female—Ardgowan Gladys, Sycamore Farms.

JERSEYS

Judges—J. W. Ridgeway, Ft. Worth, Tex., and C. H. Staples, Baton Rouge, La.

Cull calf—1, Oxford Astor's Design, Crive Hall Farms, Nashville, Tenn.; 2, You'll Do Brookside, King, Maryvale Farms, Brookfield, Mass.; 3, Oxford Lane Volunteer, Elm Hill Farm, Brookfield, Mass.; 4, Annapurna Rancho, Orange, Calif.; 5, Crive Hall Farms, Nashville, Tenn.

Bull, 1 year and under 18 months—1, Bell Boy's Whitehead, Maryvale Farms; 2, Oxford Lass's Design, Crive Hall Farms; 3, Noble Forward, The Oaklands, Ann Arbor, Mich.; 4, Taft Ranch Jersey Farms, Taft, Tex.; 5, Breezy Hill Farm, Madisonville, Ohio.

Bull, 18 months and under 2 years—1, Foremost, The Oaklands; 2, Polly's Volunteer, Annapurna Rancho; 3, Gantlett's Volunteer, Annapurna Rancho; 4, Maryvale Farms; 5, Graham Farms, Washington, Ind.

Bull, 2 years and under 3—1, Xenia Sonny, Annapurna Rancho; 2, Philidora's You'll Do, Twin Oaks Farm, Morristown, N. J.; 3, Forward's Velvetser, M. S. Toredahl, White Bear Lake, Minn.; 4, Elm Hill Farm, Brookfield, Mass.; 5, Breezy Hill Farm, Madisonville, Ohio.

Bull, 3 years and under 4—1, February Fern's Noble, Twin Oaks Farm; 2, Brampston Standard Sir, Pebble Hill Plantation, Thomassville, Ga.; 3, Maiden Fern's Hill Farm, Madisonville, Ohio; 4, Maryvale Farms; 5, Graham Farms, Washington, Ind.

Bull, 4 years and over—1, Bermuda Westford Noble, Crive Hall Farms; 2, Cedarline Golden Sultan, Elm Hill Farm, Brookfield, Mass.; 3, Cowslip's Look Here, Hugh W. Bonnell, Youngstown, Ohio; 4, Riverby Farms, Grafton, Wis.; 5, Twin Oaks Farm, Heifer calf—1, Design's Queen Onyx, Crive Hall Farms; 2, Golden Brookdale, Gala, Maryvale Farms; 3, Volunteer's Rosebay Bertha, Elm Hill Farm; 4, Pebble Hill Plantation; 5, Maryvale Farms.

Heifer, 1 year and under 18 months—1, Palatine's Baby, The Oaklands; 2, Design's Geneva, Crive Hall Farms; 3, Cedarline's Golden Miss, Elm Hill Farm; 4, Breezy Hill Farm; 5, Wegman Hill Farm, Hamilton, Ohio.

Heifer, 18 months and under 2 years—1, Bermuda's Pansy, Crive Hall Farms; 2, Pebble Hill's Bright Maiden, Pebble Hill Plantation; 3, Primate's Prima; 4, D. Madding, Bridgeport, Ill.; 5, Hugh W. Bonnell, 5, Longview Farm, Lee Summit's, Mo.

Heifer, 2 years and under 3—1, Brampston Standard Sybil, R. H. Crosby, Hay, Miss.; 2, Imported Last Chance, P. I. Harrison, Elkton, Md.; 3, Westford's Champion Folly, Annapurna Rancho; 4, Crive Hall Farm; 5, D. Madding.

Cows, 3 years and under 4—1, Volteer's R. R. Bain, Palms, Calif.; 2, Volunteer's Master Maid, Taft Ranch Jersey Farms, Taft, Calif.; 3, Vivienne, J. D. Madding; 4, Crive Hall Farms; 5, Hugh W. Bonnell.

Cow, 4 years and over—1, Dreaming Sarna's Gold, J. D. Madding; 2, Palatine's Vera Leigh, Annapurna Rancho; 3, R. R. Bain, Palms, Calif.; 4, Breezy Hill Farm; 5, Breezy Hill Farm.

Bull, 1 year and under 18 months—1, Golden Cord Prince, J. J. Lynes & Sons, Plainfield, Iowa; 2, Alta Crest Nevertell, Alta Crest Farms, Spencer, Mass.; 3, Sycamore Farms; 4, J. J. Lynes & Sons; 5, Fairfield Farm.

Bull, 2 years and under 3—1, Betty's Sons of Sevilla of Old Forge, Sycamore Farms; 2, Woronack White Mamie, Alta Crest Farms; 3, Fair Field's Spicy Girl, Fairfield Farm; 4, J. J. Lynes & Sons; 5, Fairfield Farm.

Cow, 3 years and over—1, Thirdpart Madge 4th, Sycamore Farms; 2, Cacapon Lass, Fairfield Farm; 3, Penhurst Pretty Pearl, Sycamore Farms; 4, Alta Crest Farm; 5, Wendel C. Wicks, Oxbow, N. Y.

Senior and grand champion bull—Willowton Satisfaction, Alta Crest Farms.

Senior and grand champion cow—Thirdpart Madge 4th, Sycamore Farms.

Junior champion female—Ardgowan Gladys, Sycamore Farms.

BROWN SWISS

Judges—J. P. Eves, Des Moines, Iowa, and W. W. Yapp, Urbana, Ill.

Bull calf—1, Suydam's Creator, Matthew Suydam & Sons, New Brunswick, N. J.; 2, Duke Royal of Bowerhome, A. E. Bower & Son, Bruckton, Ill.; 3, Suydam's Beauty, Suydam & Sons; 4, Hull Bros. Co.; 5, James Harkness, South Kortright, N. Y.

Bull, 18 months and under 2 years—1, Beauty's Carl of Meadow Green, J. P. Allyn; 2, Bert Dixon, Mooney & Larrabee; 3, Magna of Bowerhome, Bower & Son; 4, Hull Bros.; 5, Schultz Bros., Galt, Ill.

Bull, 2 years and under 3—1, Forest Girl's Son of Walhalla, Mooney & Larrabee; 2, Magyar of Bowerhome, Bower & Son; 3, Emma's Carl of Lake View, Hull Bros.; 4, Schultz Bros.; 5, D. N. Boice, Churchill, N. Y.

Bull, 3 years and under 4—1, Suydam's Nero, J. P. Zoller; 2, Ursula's College Boy of Lake View, Hull Bros.; 3, I. B. S. C. Sir of the East, Suydam & Sons; 4, L. K. Cleveland, Moline, Ill.

Bull, 4 years and over—1, March Molly 3rd's Master, Allyn; 2, Cinnamon of Meadow Green, Hull Bros.; 3, Ursula's Stasis, Mooney & Larrabee; 4, D. N. Boice.

Heifer calf—1, College Boy's Nellie of Walhalla, Zoller; 2, Believe's Schooney Girl, Mooney & Larrabee; 3, Nero's Mari-gold of Walhalla, Zoller; 4, Hull Bros.; 5, Suydam & Sons.

ROKSTREYS

Judges—Axel Hansen, Minneapolis, Minn., and J. F. Flinn, Manhattan, Kan.

Bull calf—1, King Beattie Armby Phyllis, Elmwood Farm, Deerfield, Ill.; 2, Carleton Supreme, C. E. Griffith, Big Cabin, Okla.; 3, Sir Fobes Ormsby Hengerveld, Elmwood Farm; 4, Maytag Dairy Farm, Newton, Iowa; 5, Iowa Board of Control, Des Moines, Iowa.

Bull, 1 year and under 18 months—1, Tritonia Dekol Ormsby Phyllis, Wisconsin State Institutions, Herd, Janesville, Wis.; 2, Mt. Riga Sir Hazel, C. E. Griffith; 3, Tritonia Homestead King, Wisconsin State Institutions, Herd; 4, Iowa Farms, Davenport, Iowa; 5, Pevely Dairy Farms, Crescent, Mo.

Bull, 18 months and under 2 years—1, King Beattie Korndyke Ormsby, Elmwood Farm; 2, Sir Billy Jennie DeKol, Silver Lake Cattle, Poland-China Hogs—Hemansse, The SAINI, MOU, Marionville, Penna.

Bull, 2 years and under 3—1, Man O'War 20th, William Schmidt's Son, St. Peter, Minn.; 2, Pevely Inka Matador, Pevely Farms; 3, Maytag Dairy Farms; 4, Board of Control.

Bull, 3 years and under 4—1, Sir Hengerveld Persistence, Red Rose Farm, Dairy, Northville, Mich.; 2, Nero's Mari-gold, Elmwood Farm; 3, Sir Ollie Korndyke Ormsby, Wisconsin State Institutions; 4, J. J. Nayak, Ilott City, Md.; 5, Iowa Board of Control, Des Moines, Iowa.

Bull, 4 years and over—1, Sir Fobes Ormsby Hengerveld, Elmwood Farm; 2, Sir Billy Jennie DeKol, Silver Lake Cattle; 3, Sir Ollie Korndyke Ormsby, Wisconsin State Institutions; 4, J. J. Nayak, Ilott City, Md.; 5, Iowa Board of Control, Des Moines, Iowa.

Heifer calf—1, College Boy's Nellie of Walhalla, Zoller; 2, Believe's Schooney Girl, Mooney & Larrabee; 3, Nero's Mari-gold of Walhalla, Zoller; 4, Hull Bros.; 5, Suydam & Sons.

SENIOR AND GRAND CHAMPION COW—Miss Lassie Ormsby, C. E. Griffith, Big Cabin, Okla.

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

SENIOR AND GRAND CHAMPION BULL—March Molly 3rd's Master, Allyn

profit secrets for 10c

These 7 secrets, for making more poultry profits, appear in the next issues of Poultry Item.

With October—read Wyatt's story, "I would rather be a poultryman than anything else."

How to have more eggs when your flock through a hard winter, and others get higher prices—all in this much more in

The Poultry Item

10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Send 10c, stamps or coin, with coupon and we start your subscription

Farm Conditions

Cambria Co., Central Pa.
Oct. 13: Potato digging well under way. Fields sprayed twice a week or oftener remained green until killed by frost. Yield small and at present prices grown at a loss. Cabbage heading poorly. Yield will be very small.

Money tight and little demand for farm produce except very small quantities. The water situation becoming serious, much hauling being done. A number of the low mines are steadily all summer have closed down on account of water shortage. Silo filling was over before frost came for the first time since silos came into general use. C. T. S.

York Co., Southern Pa.
Oct. 13: Weather cool; ground very dry. Impossible to plow for fall seeding at places. A good deal of seeding done where the ground could be plowed. Most of corn cut. Crop poor. County Fair on this week, well attended. Fine display of fruit and vegetables in spite of drought. A number of chicken farms having chicken troubles. Eggs selling at 40c per dozen. Factories working more regularly. M. B. Y.

Wirt Co., Northwestern W. Va.
Oct. 13: Warm days and cool nights. Have had several hard frosts. Water getting scarce; springs and wells drying up. Driest ever known here. The Farm Bureau has bought twenty carloads of hay and straw in this county. Very little wheat and rye sown yet. Veals 12c, cream 30c, butter 40c, eggs 30c. E. N. B.

James City Co., Eastern Va.
Oct. 10: Have had a most unusual season. Has been dry since spring opened. We had a good wheat and rye crop and got fairly good prices, \$1.20 for rye and \$1.05 for wheat. Corn practically a failure and the quality worse. Smut and ear worms the worst I ever saw. Rye and clover, which followed a little rain in September were destroyed by army worms. They also took the third cutting of alfalfa. We will have sufficient corn and hay for our stock. W. A. Bangs.

Midlin Co., Central Pa.
Oct. 15: We are still having very dry weather in this county. Wheat sown four weeks ago is not coming up yet. Farmers husking corn mostly just in the forenoon on account of the dry, hot weather, getting a few hundred bushels instead of ten or twelve. Water getting scarce; springs low and a number of wells dry. Price of wheat 70c, corn 90c, oats 40c, eggs 35c, butter 50c, apples \$1.25, cabbage can be bought for 25c per pound. J. H. B.

Midlin Co., Central Pa.
Oct. 15: We are still having very dry weather in this county. Wheat sown four weeks ago is not coming up yet. Farmers husking corn mostly just in the forenoon on account of the dry, hot weather, getting a few hundred bushels instead of ten or twelve. Water getting scarce; springs low and a number of wells dry. Price of wheat 70c, corn 90c, oats 40c, eggs 35c, butter 50c, apples \$1.25, cabbage can be bought for

The Art of Spending

By W. D. ZINN

I HAVE read with interest Mr. Agee's explanation of the cause of the present hard times. I believe his conclusions, generally speaking, are correct, but I have been studying some of my neighbors since reading his article and I have concluded there are many exceptions to the general rule he has laid down.

Within sight of my home is a family in which the parents have obeyed the Divine command to multiply and replenish the earth. These parents are first-class people in almost every respect, but they have failed to impress on the minds of their children the importance of being economical. I think it is no exaggeration to say that these children spend thirty dollars every month for candies, soft drinks and ice cream, much of which they would be better off if they did not have.

A gold shortage, unemployment and over-production, as Mr. Agee says, may be responsible for most of the depression now existing, but when it comes to individual families the lack of knowing how to spend money wisely has its responsibility for their present condition.

One of the most severe criticisms I have made against our schools, as many of my readers know, is that they are teaching extravagance instead of economy. The results of this kind of teaching are cropping out in the number of divorces granted young married couples. To my way of thinking nothing is so badly needed to be taught in our schools today as to how to earn a dollar and how to spend it. When young men who owe for the suit of clothes they are wearing will drive a hundred miles to witness a ball game for which they have paid three dollars, there is certainly something lacking in their training.

What Is Your Reputation Worth?

Last spring I had an application in the person of a young man who wanted to rent a vacant house on one of my farms. I told him I had just got rid of a bad tenant with much difficulty and that the next tenant would have to have a good reputation, else he would not get the house.

I also told him that every one made his own reputation. If you do not have a good reputation it is your own fault. His hesitancy in giving me references caused me to doubt whether he was the kind of man I was looking for. He finally named two farmers whom I happen to know. In a few days I called on one of these men and he soon told me my applicant for the house was not the kind of man I needed. Furthermore, he said he hoped I would not let him move into my house, for they did not want him in the community.

Here was a young man with quite a little family without bread and without a shelter, but I was forced to turn him down simply because he had failed to make for himself a good reputation.

A man of means can get along with a poor reputation (but I must say it is a poor get along), but a poor man with a large family cannot afford not to have a good standing with his acquaintances.

Even in these times there are plenty of farmers who would like to have tenants, but they are afraid of being cheated in the selection of them. Thus it is that good men often are turned down because of the shortcomings of men of their occupation. It is a universal fact that the good suffer because of the evil found in the other class.

Another man came to me last spring saying that he had tried all over the country to find a place on a farm where he could move. I was frank enough to tell him I did not want a man on my farm whom no one else would have, and he passed on.

I kept one man thirty-one years on my farm, and he would still be there had he not bought a farm of his own. Another man lived 15 years on my farm and but for his death would have been there yet.

If poor men knew how important it is to have a good reputation more certainly would strive to have it.

Truck Crops

By GILBERT S. WATTS

WITH few exceptions it is much less trouble and expense to buy vegetable seeds than to save them. In earlier days this was not true and the home saving of garden seeds was a primary activity of all good gardeners.

At the head of the list of seeds which can be home saved to especial advantage today I would place sweet corn for several reasons. The job is easy, provided the selected plants are located at a distance from other varieties of either sweet corn or field corn. Marked improvement in the subsequent crop is practically assured when selecting from the usual run of sweet corn. Then in addition to the advantages from selection, prompt and thorough curing of the seed practically assures a good stand of plants. The probability of loss or curtailed profits on account of poor stands is greatly reduced. And we must admit that poor stands of sweet corn are a very common thing.

Mark the Best Ears

If only a few ears will be required for seed a very simple way is to mark some of the finest ears when making the first pulling for the table or market. We simply place a rubber band over each selected ear. Strings or bits of rag will serve equally well. Then to produce a quantity of fine seed we plant the best of the selected ears in a "seed increase" patch.

Curing is accomplished by hanging the ears in strings of a dozen or more and by sticking them on finishing nails in the walls of our seed room or any airy place. The important thing is to have the seed thoroughly dry before mold can set in or freezing weather arrives.

Perhaps some would place tomatoes at the head of the list of seeds that can be saved at home to good advantage. I have not done so because the quality of tomato seed as bought averages very high. Yet there is much satisfaction, and in some instances advantage, in home saving for the tomato crop. We select desirable plants, not individual tomatoes, at the early part of the picking season. A barrel hoop is placed over each of these as a mark for the pickers to take no fruit. When a quantity of fruit is ripe on each of the marked plants all are saved for seed.

Seeds from Strong Plants

These are cut across and the seed bearing pulp is squeezed into wooden or earthen vessels. After about 48 hours fermentation the mass is mixed with water. The good seeds will settle and the waste materials will rise to the surface where they may be poured off. After several washings the clean seeds are spread on cloths to dry.

The only other crops from which we regularly save seed are squashes and eggplants. With the first of these varieties must be widely separated to avoid mixing.

The advantage of home saving eggplant seeds lies largely in keeping up an early and disease-free strain. We mark the earliest and finest specimens, from strong healthy plants only.



"Outwears Them All!"

Wearers will tell you that the Ball-Band Mishko "outwears them all." Shown above is the toe cap style. Notice double and triple stitching of extra strength thread, and rust-proof nails reinforcing the sole. (Also made with sewed sole.)

"I never saw a shoe that gave as much wear for the money"

— writes R. M. Parker, Erie, Penn.



Many men like the plain toe style Mishko with no seam or box to stiffen the toe. Comes in men's sizes—all heights.

The Moccasin style Mishko Shoe (shown in 6" height). Comes in all sizes and heights for men and boys.



Look for the Red Ball

BALL BAND

Built-to-the-foot

BOOTS · RUBBERS · ARCTICS · GALOSHES · CANVAS SPORT SHOES
LEATHER WORK SHOES · WOOL BOOTS AND SOCKS

PENNSYLVANIA FARMER

Published Weekly

Established 1877

November 1, 1930



MANY of you have written us almost unbelievable stories about your Mishko-sole leather work shoes. "I'm starting my third season on my first pair." "If you made that sole of iron, it couldn't wear longer."

Today the Mishko Shoe has more "guts" than ever before—yet costs no more. The tough, flexible water-proof sole—an exclusive Ball-Band product—has no rival. The upper is of grain leather—soft, pliable, durable. Seams are double and triple stitched to keep them from pulling apart.

More than five million pairs of these work shoes have given wearers extraordinary service from Maine to California.

Mishko Shoes carry the same Red Ball trade-mark found on Ball-Band rubber footwear for over thirty years. Both are made for more days wear in our great factories at Mishawaka, where we specialize in one task alone—the making of lasting footwear. Our line includes over 800 items. There's a Ball-Band dealer near you. If you do not know his name, write us. Remember to look for the Red Ball.

MISHAWAKA RUBBER & WOOLEN MFG. CO.
484 Water Street, Mishawaka, Indiana

Philadelphia

Pittsburgh

Harrisburg

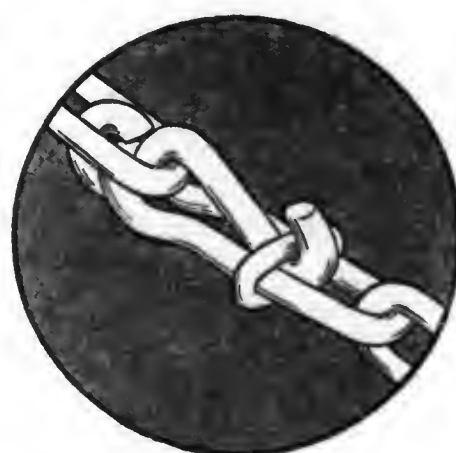
You'll get more mileage with McKAYS



And you'll never lose TIRE CHAINS with the McKAY FASTENER

—for the McKay Fastener is the best fastener on the market. 1—Holds with a never-let-go grip. 2—It's the easiest fastener to open and close. 3—Its operation is not affected by snow, ice, mud or rust. 4—No tools of any kind necessary in opening and closing.

And McKays will save you money . . . because of the extra mileage built into them. McKays are hardened by a



special process . . . they're tough . . . they last . . . you can treat 'em rough.

When you need chains, ask for McKays.

UNITED STATES CHAIN
& FORGING COMPANY
Union Trust Bldg., Pittsburgh, Pa.

The New Silvery Rust-Resisting
McKAY
TIRE CHAINS

Now you can
get
McKAY
Steel or Rubber
Tire Chains

Farm Facts and Fancies

By ALVA AGEE

THE true purpose of taxation is to provide benefits, and the latter, in their very nature, could not be a burden. There is something mighty wrong when taxation becomes a grievous burden, and in many cases a deadly one. In the first place we must be mixed in our thinking about what are benefits. I reckon that is half of our trouble. In the second place we distribute the cost of what are actual benefits so unfairly that one person does not contribute his fair share and another must contribute so much that what should be benefits are the opposite in character.

It results that much taxation is so deadly today that it does not leave to many a farmer one-half of what he receives from his land after paying costs of production, if all costs are figured, as is done in manufacturing, and to some farmers it leaves nothing at all. The original idea of providing benefits is totally forgotten. Our system of taxation has a stranglehold on a big percentage of property owners.

What Are Benefits?

We make curious mistakes in determining what are benefits to any taxing district from township to state. One may say that a high-class automobile is a good thing, but as a gift to a strictly poor family it would be far from a benefit. A thing may be good in its rightful place and an evil out of place. A community that takes for granted that the best roads and schools and other provision for the public are good things, and copies the methods of richer communities when it cannot afford to do so, finds through experience that whatever is secured at the expense of deadly taxation is not a benefit but an evil. Benefits are what are advantageous, and there can be nothing that is advantageous if its cost is wholly out of proportion to ability to pay for it.

Apportioning Cost

Higher grades of public service might fall into the class of benefits if the cost were rightly shared by all. As matters stand, they are undesirable because they would bring too heavy taxation upon a considerable part of the people. They do bring such a burden because we go ahead and have them on the assumption that they must be good for us because they are desirable for those who have greater ability to pay.

I do not have much faith in any reduction in the expense of all public service—the public, like the individual, does not take kindly to reducing the level of living, and in the case of the public there is not absolute necessity so long as there is power to tax and collect. It follows that relief from a condition that a vast number of farmers find nearly intolerable probably should be sought chiefly in such readjustment that people be made to pay more in proportion to ability.

"Ability to Pay"

No argument is needed today in support of the principle that taxes should be levied in accordance with the individual's ability to pay; that is to say, in accordance with his ability to provide for himself. The most of our best authorities on taxation are agreed on that. The poll tax was an approximation to that ideal when our first colonists held land in common and each man lived from his own labor. Later, private property was accumulated in the form of land and equipment, and the property tax came into general use. The ownership of property served for a time as a partially satisfactory criterion of the owner's ability to pay but just as older European countries had found its weaknesses and turned in large degree to other means of determining

what the individual should contribute to the public costs, we found it failing in practice and yet have clung to it within state boundaries.

The Property Tax

Ever since society was organized there has been naturally much effort of one class of citizens to shift public burdens on another. Since an immense share of our wealth is no longer in land and other visible forms of wealth, but in such intangible, invisible forms as stocks, bonds, etc., the property tax, as a chief source of revenue, has utterly failed to afford justice. The ownership of real property always failed to indicate the ability of the owner to pay. Indebtedness of the farm, crop failure, and other causes of impairment of income were a hardship and violate the principle that every man should pay according to ability. But the great failure of the property tax is that it cannot reach a big part of the invisible wealth of a county or a state.

Mending Matters

I wish all of our farmers could see that a righteous change in our means of determining the individual's ability to pay taxes must come through the own effort. The people who escape the payment of their fair share through our adherence to the old-time property tax as the chief means of providing revenue cannot be expected to help. Other countries found that property was failing as the sole chief means of determining what the individual should pay, and need to make use of some other criterion of ability as the chief one.

I do not mean abandonment of the property whose principle should be found in any taxing scheme to take care of land held out of production and of property held for personal enjoyment, or as a speculation only. There are other instances in which property tax can promote justice. Neither should we hesitate to return to some consumption taxes that do not work an undue hardship on those earning a living. Our tax on gasoline is an example. But the chief determination of ability to pay should be on actual net income.

The Difficulties

Of course there are difficulties, but they are present in every effort that has been made to find means of determining what is the rightful contribution the individual should make to his government. Always we make improving an income-tax law make its provisions more equitable and enforceable, but the beginning to realize that the property tax, a major means of revenue, is a fully unjust under modern conditions. Its deadly burden to the farmer is removed by accepting a more modern and just method of determining ability to pay. In such a scheme income should be a leading criterion of ability.

Wheat for Pigs

Will you please send me a ration for young hogs, using wheat, oats, corn and tankage to be fed in a self-feeder? Should the wheat be ground fine?
R. M. C.

FORTY parts coarse ground wheat, 30 parts shelled or ground corn, 20 parts ground oats and ten parts tankage or fishmeal make an excellent ration for brood sows, growing gilts and young pigs. A larger amount of the coarse ground wheat may be used satisfactorily, replacing a larger amount of corn than is recommended in the above formula.

For fattening pigs 92 parts coarse ground wheat and eight parts tankage will make a satisfactory and economical ration.
F. L. B.

Electric Lighting

... Low in Cost ...

*Brings many benefits
to the Modern Farmer*



A corner of a living room on a Pennsylvania farm.

WITH THE COMING OF FALL, the shadows steal into the house and barn early and linger long in the morning. Much work is done under poor light, by groping in shadows and fumbling in semi-darkness. Electric lights transform the dismal morning and evening chores to cheerful tasks. Many people, however, use electricity so sparingly that they get but meagre benefit, and few fully appreciate the value of electric lights in labor and fuel saved, more and better work done, safety from fire and accidents, and more cheerful living conditions.

Safety From Fire

It is a marvel that fires have not been more numerous with the use of lamps in the house and lanterns about the barn. Only extreme care and good fortune have kept the loss down. Electric lighting with proper wiring removes this terrible hazard.

Accidents Reduced

It is common knowledge that there are many accidents on the farm directly due to lack of light. One wonders that there have not been more since so much work is done with little or no light. Adequate electric lighting greatly reduces this hazard to life and limb.



Children quickly find the well-lighted corners for their reading and studying. The cost of current is less than 1¢ per hour for this good light.

Hours of Labor Saved

Contrast two farms—one equipped with adequate electric wiring and one where the household work must be done under the light of lamps or lanterns, where trips are made to the cellar, the spring house, the bed room, with one hand engaged in carrying a lamp, only one hand free for work or support . . . or carrying a lantern into the barn and groping in the shadows while milking or caring for the live stock. The time saved through proper electric lighting commonly amounts to from one-half hour to an hour or more per day from Fall to Spring. In addition there is the labor saved in not having to clean lamp chimneys and trim wicks.

Fuel Saved

The electric light bulb is many times more efficient for the amount of light furnished than any other system of lighting. The current costs very little, while the saving in fuel for lamps and lanterns amounts to a considerable sum in a month or a year.

More and Better Work is Done

One successful farmer, in commenting on the value of electric lights, stressed the many important tasks done which would be left undone if it were necessary to go for a lantern or to do them in the dark. The cost of the things left undone might be very high. Electric Lighting is clean, and there are many tasks, particularly milking and caring for the milk, where cleanliness is of extreme importance. It is common practice among poultrymen to use artificial light to increase egg production during the Fall months when egg prices are high. Some striking figures are available regarding increased production due to good lighting.

The Farm is a Business and a Home

Electricity brings not only satisfaction and convenience, but also a profit to the user.

Probably the feature most appreciated is the part that electric lights play in the home. Those who lived in the day of the lamp and lantern can readily picture the single lamp in the kitchen, one light in the living room about which the entire family tried to read, sew or study, and trips to the bed room in the dark in preference to carrying a lamp. With electric lights the kitchen may be well lighted wherever the work is to be done. Separate lights are available in the living room, at the piano, at the desk for study or at the comfortable chair before the fire, or even at the head of the bed.



Electric lights on this Pennsylvania farm result in increased egg production during the time of high prices.

Electric Lights Cost Little But Are Worth Much

Empty sockets do not give light. The cost of current for light is so small that it will pay to keep all sockets filled. A 40-watt bulb lighted for 25 hours will consume 1 K.W.H., which may cost from 10 cents down to as low as 3 cents; that is, 2½ to 8 hours use of a 40-watt bulb for 1 cent. Place your own valuation of what electric lights will be worth to you in safety, labor saved, more and better work done, fuel saved, and more satisfactory living conditions. One successful farmer states that his lights alone are worth more to him than the entire cost of his electric bill, which averages approximately \$7.00 a month. Instances such as this support our statement that

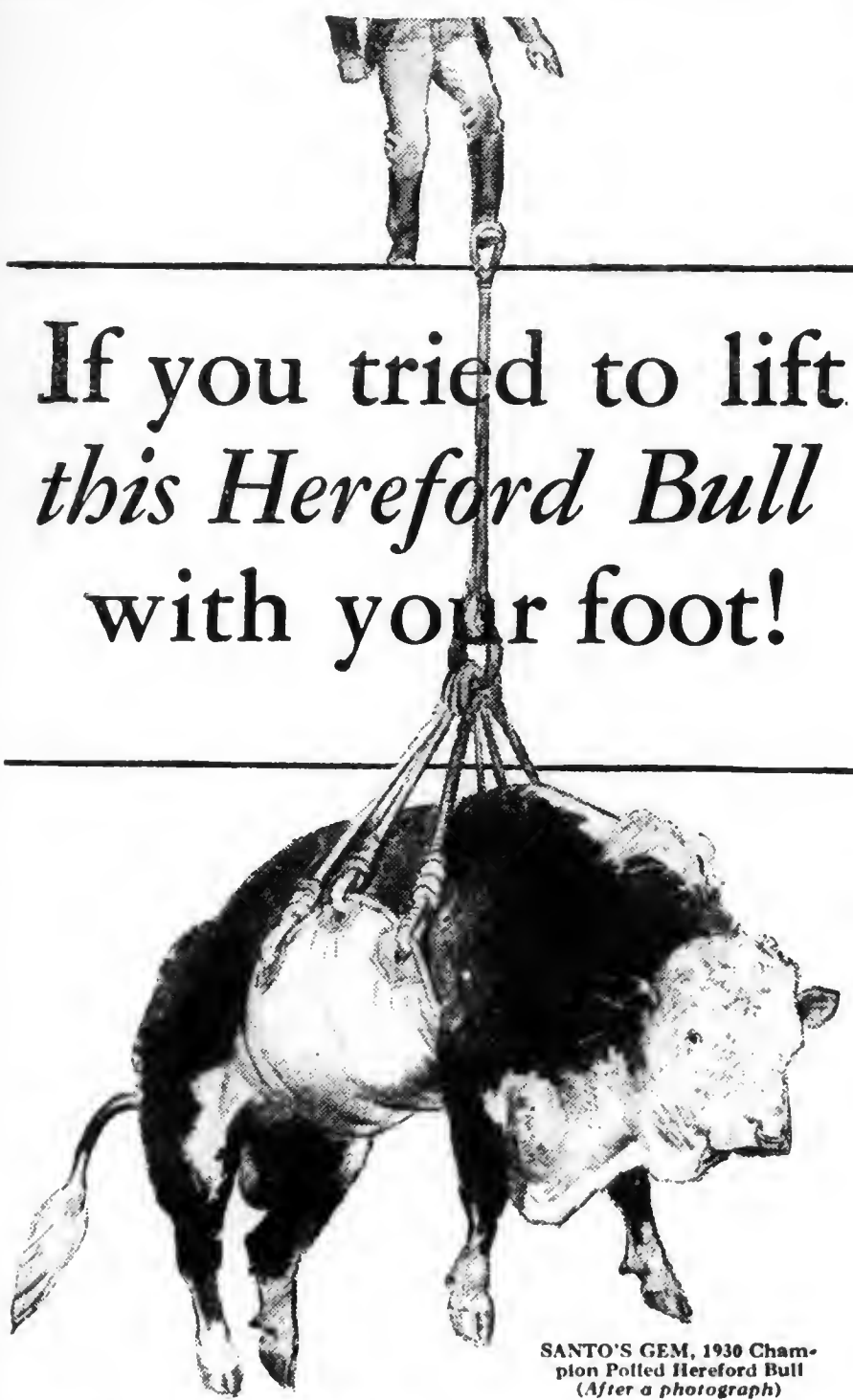
"IT COSTS MORE TO DO WITHOUT ELECTRICITY THAN TO USE IT"

Published in the interest of Rural Electrification by the

Bradford Electric Company
Chester County Electric Company
Chester Valley Electric Company
Duquesne Light Company
Edison Electric Company
Edison Light & Power Company
Erie County Electric Company
Erie Lighting Company

Keystone Public Service Company
Luzerne County Gas & Electric Company
Metropolitan Edison Company
Northern Pennsylvania Power Company
Penn Central Light & Power Company
Pennsylvania Electric Company
Pennsylvania Power & Light Company
Pennsylvania Power Company

Philadelphia Electric Company
Scranton Electric Company
South Penn Electric Company
Southern Pennsylvania Power Company
Sullivan County Gas & Electric Company
Wellsboro Electric Company
West Penn Power Company



If you tried to lift
this Hereford Bull
with your foot!

SANTO'S GEM, 1930 Cham-
pion Polled Hereford Bull
(After a photograph)



Men's short brown boot; comes
in knee to hip lengths

LIGHTER!
TOUGHER!

And yet the excess weight in
ordinary boots makes you waste that
much energy every day!

DURING a single day spent in ordinary
boots, you lift at least 2,420 pounds
of absolutely useless weight! This weight
is greater than that of Santo's Gem, 1930
Champion Polled Hereford Bull.

You put this unnecessary drain on your
energy if each boot is only two ounces
heavier than it ought to be.

You can't help covering at least five and
a half miles in a full working day even if
you are merely doing winter chores. Five
and a half miles mean 9,680 steps at the
very least, and 9,680 steps, at 2 ounces on
each foot, mean 2,420 unnecessary pounds.

But you can help wearing heavier boots
than you have to!

There is no excess weight in a Goodrich
boot. It is made of twenty-seven different
rubber compounds and rubberized fabrics
chosen because they make it tough without
making it heavy. The B. F. Goodrich Foot-
wear Corporation, Watertown, Mass.

Goodrich
Rubber footwear for every member of the family
—another B. F. Goodrich Product



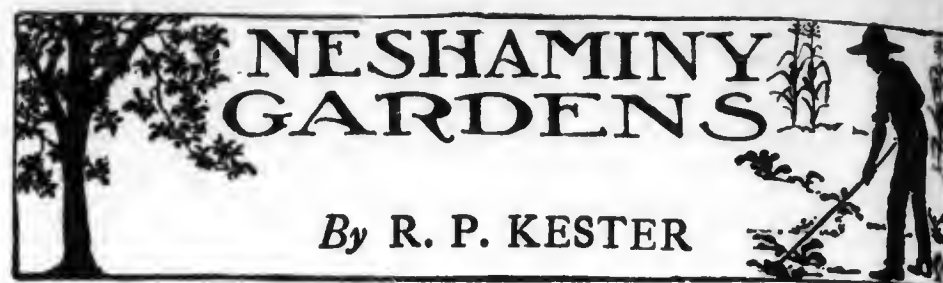
Men's 15-inch black
Da Bois



Women's Zipper in
swagger-tan



Men's four-buckle
all-rubber brown
gaiter



By R. P. KESTER

THERE'S a lot more trouble in
the world than there should
be—yes, I may say a lot more
than there need be, and a lot more
than there would be if everybody lived
by the Golden Rule. Somebody
wrote long ago: "Man's inhumanity
to man makes countless millions
mourn."

I was inspired to this outburst on
reading a letter from a farm woman
which I just received. She relates the
accommodations, privileges and duties
incident to her husband's employment
on a farm in Pennsylvania. The ten-
ant house in which they live is not
provided with any of the modern con-
veniences and comforts, and the per-
quisites are few and more or less
begrudged. In addition to all this the
owner had asked her to board a hired
man and take him into her family.

For several years I have been try-
ing to impress on farmers who have
tenant houses that these homes should
be made more homelike and livable.
The woman referred to might be liv-
ing almost anywhere and her descrip-
tion would be true to nature. Wives
and mothers have a right to demand
good living conditions wherever they
live and whatever their occupations.
Economic conditions just now may
force people to put up with poor
houses and no modern improvements,
but it is not fair. Again, when times
are good hired men and tenant farm-
ers rightfully pass by farms that have
no desirable home in which to live.
Also, a wife and mother has a right
to pass on the kind and character of
the men she is asked to board.

A well-known public man and
farmer in Bucks county told me this
morning that he was making money
out of hogs this year by feeding them
solely on alfalfa and wheat, ground
together. He has a roughage mill of
a well known make and by hitching
up his tractor for power turns out a
complete ration in short order. He
says that the market wants pork that
is not too fat, hence wheat makes a
better grain feed than corn when fed
with ground alfalfa. He says he is
realizing much more than the present
market price of wheat by this meth-
od. He made the remark that if farm-
ers would use their heads more and
have the nerve to cut the strings that
bind them to habit and custom many
of them would get along better than
they do.

Some farmers may object to such
blunt statements, but we will have to
take it and like it. Too many are slow
in learning that economic conditions
have changed greatly during the last
decade. The East no longer has a
monopoly on eastern markets. Trans-
portation methods have been improved
so much that distance no longer bars
products from far-away places. Fruit
growers, poultrymen and market gar-
deners have been brought face to face
with this fact, and dairymen and
stock raisers must soon meet the
same problems.

I heard the voice of George Russell,
the Irish poet and economist, over the
radio the other evening. He was
speaking at a meeting in Wisconsin
held to commemorate the helpful work
done to humanity and the dairy in-
dustry by Professor Babcock. An
award in his honor, made possible
through the generosity of Senator
Capper, was presented and George
Russell, known to the world best by
his signature "A. E.", was one of the
speakers of note. It is not usual to
couple the two terms "poet and econ-
omist" together, but the words fit in
the case of Mr. Russell. He, with other

literary men of Ireland, have aided, if
not led, in the work of revolutionizing
the condition of agriculture in that
country. It is his belief that all men,
whatever their calling in life, owe it
to their country to lend a hand in pro-
moting the best interests of farmers.
It is his observation that that is not
the case in America.

I suppose most people do as I do
unconsciously, when listening to a
voice over the radio, form a mental
picture of the speaker. Until tele-
vision is developed more fully I sup-
pose we will have to get along with
this imaginary, mental picture. But I
find these pictures are not reliable.
When I was listening to George Rus-
sell, his voice and intonation presented
to my mind a rather tall, slim,
smooth-faced man with a clerical ap-
pearance. The next day I saw his
picture in a magazine and it showed
a rather stout, short man with a full
beard.

Every year for sixteen years I have
been urging farmers about this time
of year to get busy and put water
into their homes before another win-
ter. I know of no similar expenditure
of money that will add as much to
the comforts of home as a water sup-
ply. Even if it is nothing more than
begin with than hot and cold water
spigots at the sink it will pay. Later,
an entire system may be provided.
The thing can be done if it is planned
and commenced. Do it now!

Friendly Talks

By
Edgar L.
Vincent

"I WISH I had a million dollars.
I wonder if there is anybody in
the world who has not wished that.
Somehow I have missed seeing him.
I have wished it myself more times
than I ought to, and few of my friends
but have done the same thing."

And do we not all know just what
we would do with it if we had a mil-
lion dollars? Sure we do. We are
certain that we would make lots of
folks happy. We would fix it so that
the Widow Brown would not have to
work so hard to keep her young ones
together. Such houses as we would
build! So many beautiful things we
would do! And if any one of these
gests that we would do no such thing
we are pretty apt to say, and say it
very sharply, "You don't know what
you are talking about. I'd just like
to try it, anyway."

But really, what reason have we to
believe that if we had a big lot of
money we would do a bit different
with it than those do who have it?
Are we so much smarter than they
are that we would not miss it ninety-
nine times out of a hundred in laying
out our money? What, for example,
would become of our children if we
could hand them a pocketful of gold
every time they asked for it? Would
we be any better or truer or more hon-
est men than we are now?

When we come to think it over seri-
ously we know that human nature
in us is pretty much the same as it
is in everybody else. True, men do
use wealth sanely and soberly and
thereby make the world better. Thank
God for such men! It is by no means
sure that we would fall into that
class. I am thankful there is one
Who knows us all better by far than
we know ourselves. And I believe the
best wish any of us can make is that
we may have the grace to use what
we do have wisely and well.

MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa.,
under the Act of March 3, 1879.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., November 1, 1930

No. 18

How to Use Farm Outlook Material

By E. L. MOFFITT

DURING the past few years considerable at-
tention has been paid to agricultural out-
look material. The thought has often oc-
curred to me, do farmers use such material or can
they make use of it in the management of their
business?

After much thought on the subject, listening to
groups of farmers discussing agricultural affairs,
talking with individual farmers and analyzing
many farm businesses, I have come to the con-
clusion that an agricultural outlook is important,
is used by many farmers and can be used by
many more farmers in the successful operation of
their farms. For, in final analysis, the efficient
use of outlook material is but the use of good
farm management principles at all times.

As I have talked with farmers and attended
their meetings, I find many questions coming out
of their problems that involve outlook material.
Such questions as: What is the price of potatoes go-
ing to be? Should I sell my crop from
the field or hold it until later? What
effect will the present price have on
the number of acres planted next
spring? What causes a big surplus
production? Is the crash in the stock
market going to reduce the price of
farm products? How long will it be
before the change in business condi-
tions begins to show on the price of
farm products? What effect will the
new tariff on beef cattle have on our
beef feeding business? What causes
the big surplus in milk production at
this time of year? Will milk products
being shipped east from western
states affect our dairy business? What
effect is the prolonged drought this
year going to have on our business
this winter and next summer?

Should Give Facts

After listening to all these ques-
tions and many others and having to
attempt to produce a satisfactory an-
swer, I have been led to believe that,
whether they know it or not, farmers
are now using very much outlook ma-
terial and could use more. All the
above questions require a knowledge
of outlook to answer them, whether
the answer involves an entire com-
munity or an individual farm. In ad-
dition to these more or less general
questions, there are many others that
affect the management of an individ-
ual farm enterprise that require some
knowledge of agricultural outlook
facts in order to prevent loss or to
increase income.

Agricultural outlook reports as they have come
out in the past few years have been rather a new
sort of information and it was not known at first
just how they could best be made usable for farm-
ers. I believe one big mistake was made in that
at first it seemed to be the idea that the report
should contain the facts and then some recom-
mendations that could be applied by farmers as a
whole. This idea will not work, because we too
frequently lose sight of the fact that the interests
of farmers in different sections of the country are
not the same. There is a conflict of interest in
many sections and what is good for one works a
hardship on another.

There has been much improvement in outlook
reports from year to year, but I believe there is
still room for much more. I believe that a good
outlook should give the facts as they are so as
to present a clear picture of the exact situation,
including most of the data from which such con-
clusions were drawn. I believe that few or no

recommendations should be given. Rather than
that, present the facts in such a way that the
farmer can see the application of them to his own
individual business. He then can plan or organize
his business in the light of the outlook, keeping in
mind all the time the particular conditions of his
own region.

To show how this might be worked, we will
assume an outlook report for sheep and wool.
Suppose that sheep on farms in the range
country as well as in the southern states had
increased in numbers markedly, a larger number
of ewe lambs had been kept and would be in pro-
duction next spring. This would mean a larger
lamb crop next year and lower prices in prospect.
Along with this imports of wool have been heavier
and, with the larger sheep population, wool prices

one exception, have been from 50c to \$3 per hun-
dred higher previous to July 1 than after.

Good management then for farmers in this state,
where the flocks of sheep are small, is to have
their lambs come early, provide them with a creep
so that they can get sufficient grain and be ready
for market in May or June. By doing this they
take advantage of the better price and less com-
petition. The competition in this period is largely
from a few southern states and is not sufficiently
large to have much influence on prices.

This practice may not be the best for all sheep
farms of the state. In the northern counties, where
the weather is colder and the spring later, it would
probably be to advantage to have the lambs come
later, grow them out on good pasture during the
summer, grain them in the fall, and have them
ready for market during the last two weeks of
November and December. This is a period fol-
lowing the movement of most of the range lambs
and the price has again gone up.

From this we see that it would not
be good policy to follow the outlook
by reducing numbers, but rather to
practice the same good management
of the flock that always pays. In
time of poor prospects or outlook we
should intensify our methods, reduce
costs, and be sure that we always are
using the most modern and up-to-date
methods.

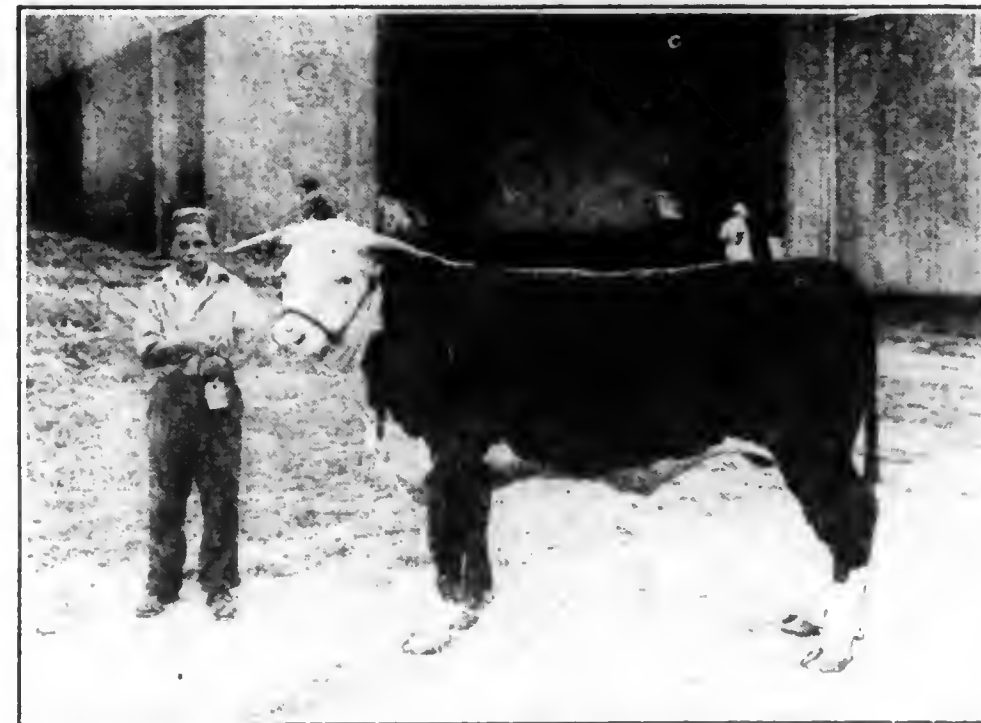
To Meet Competition

As far as wool is concerned, the
bulk of the sheep in the state are of
the fine wool breeds. This wool is not
the finest or longest stapled wool pro-
duced in the world, but for strength
and character there is no better wool
than is produced in southeastern
Ohio, West Virginia and southwestern
Pennsylvania. Because of this fact
the wool manufacturers desire the
wool and, even though there may be
an overproduction of wool of other
grades, there usually is spirited buy-
ing of this wool and the growers re-
alize better than the average market
price.

A bad outlook for sheep and wool
then means for our farmers to use
better management by culling out the
aged ewes, save the daughters of the
best ewes, keep a good pure-bred ram,
increase the percentage of lambs rais-
ed, feed a good ration, improve pas-
tures, protect from disease and insect
pests, and produce lambs and wool at
a lower cost. This will help to meet
competition and increase profits.

What has been said here of the
sheep enterprise could just as well be
said of any other project on the farm. To show
how it works, we will assume a poor and discour-
aging outlook for the poultry producer. Eggs and
poultry are cheap, numbers of poultry have in-
creased, more produce is coming in from other
sections, feed prices are moderately high, and gen-
eral business conditions are not good. To view
such an outlook might make one decide to sell all
his poultry or at least reduce it and go into some
other line of farming. However, I do not feel that
such should be the case. Under these conditions,
if never before, is the time to use the very best
poultry management practices that are obtain-
able.

The poultry houses should be made clean, com-
fortable, sanitary, well ventilated, but not draft-
y, the brooder houses moved to clean ground, and
a good quality of disease-free chicks secured.
These should be grown properly so as to produce
big, healthy pullets. When the pullets are put in
the laying house, all (Continued on page 20.)



The success of the farm operations is usually measured in terms of
profit for the amount of management and labor expended. This same
factor should hold true for the beef cattle fed. However, in the Junior
Beef Calf Club, as conducted in Cambria county, Pa., there are other
factors which cannot be measured in dollars and cents which are equally
as important. The most important of these has been developing respon-
sibility of the boys and girls engaged in club work, principles of livestock
management and the principle of showmanship.
Above is first prize calf in the 1930 club, shown by John Pryce, 13
years of age, of Ebensburg, R. D., Pa., who has been a member of our
beef club for four years. At the club's round-up 26 head of calves sold at
an average of \$12.93 per cwt. H. C. McWilliams, County Agent.

do not have much prospect of increasing.

Now such a report, if applied to sheep farmers
as a whole, would mean that the way out would
be to start a retrenching movement to reduce the
number of sheep in the country. This would tend
to reduce supplies and at the same time increase
prices. This plan, however, should not be the one
to be followed by all farmers.

If we apply the same outlook to Pennsylvania
conditions our procedure would be entirely differ-
ent when we know existing conditions. Our
farmers do. When we consider the fact that ap-
proximately 75 per cent of the lamb consumed in
the country is consumed east of Pittsburgh and
north of the Mason and Dixon Line, our farmers
are in the center of the market. The range lambs
which furnish the bulk of the market lambs come
on the market during the period from about July 1
to November 1. Also, a study of lamb prices on
the Chicago market from 1920 to 1928 shows that
lamb prices during the last eight years, with but

PENNSYLVANIA FARMER

Published Weekly
Consolidated with
PENNSYLVANIA STOCKMAN AND FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
T. D. HARMAN, Vice-Pres.
GEORGE N. SLOCUM, Vice-Pres.
NEFF LAING, Manager

EDITORIAL STAFF
E. S. BAYARD, Editor-in-Chief
C. L. WHITE, Editor
MILES HORST, Field Editor
M. C. GILPIN, Editor
G. W. HARRIS, Field Editor

Editorial Office: PITTSBURGH, HARRISBURG, PHILADELPHIA
Contributing Editors: R. P. Kester, Alva Agee, L. W. Lighty, W. D. Zinn,
R. U. Blasigame, J. F. Shibley, F. L. Bentley, J. G. Lipman,
B. W. Fletcher, H. C. Kuzdel, A. A. Berland,
R. L. Seehring-Hansen, Gilbert S. Walls
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR.
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for livestock and classified advertising. No deceptive, immoral or swindling advertisement inserted at any price.

Member Agricultural Publishers' Association,
Audit Bureau of Circulations.

Volume 103, No. 17
Established 1877

A SOUND INVESTMENT

ONE extension specialist reports that he has more inquiries for good breeding ewes this fall than in any previous year. Those who want to increase or improve their flocks are taking advantage of low prices to do it. This looks like sound policy. Did anybody ever lose money on good breeding ewes bought at low prices?

OVERCOATS AND BLANKETS

THE Clothing Research Bureau reports that there is a positive shortage of winter overcoatings, and if a hard winter comes the supply will not be adequate. The same authority reports a shortage of wool blankets. It is rather interesting to learn of a shortage of any wool fabrics after years of plenty. The Bureau expects the same to have a rather wholesome effect on the wool market.

IN STORAGE

PRODUCERS of meat and dairy products are not faced with heavy supplies in storage this fall. Stocks of meats, poultry, butter and lard are all below those of last fall and all below the average of the past five years. Lard stocks are away down and corn, the stuff that makes big supplies of lard, is comparatively scarce and dear. Eggs are the only notable exception to the rule of comparatively light storage supplies.

NATIVE NUTS

THE American Forestry Association, with the cooperation of the Department of Agriculture, the Boy Scouts of America and the American Walnut Manufacturers' Association, is setting up a five-year program of planting native nut trees, mainly black walnut. Those concerned call it a billion-dollar project, and claim that it will be much more than that when the trees reach the age when they will produce nuts and timber. Where does the Northern Nut Growers' Association figure in this scheme?

THE OLD SYSTEMS

IT appears to be fashionable with some orators to describe our system of marketing farm products as inadequate, inefficient, extravagant and even antiquated. It should not be hard for anybody who can discern all these defects in the present system or systems to point out some remedy, but that is rarely even suggested except in such general

terms as "orderly marketing." The fact is that our present system of marketing grain is the most economical yet devised in any country. The same is true of our system of marketing cotton, livestock and the products of the dairy. None of these systems is perfect, but at the same time no one who denounces them has produced anything better. All the progress made in marketing these commodities, after a decade of talk about it, has been made under and by the use of the established system or systems and not by the institution of new ones.

THREE REASONS

THE Census Bureau suggests three reasons for the decrease of 1.2 per cent, or 73,263, in the number of farms in this country since 1920. Those reasons are consolidation, subdivision and abandonment. Probably consolidation should be put first, as that tendency has been evident throughout the decade and continues. In the eastern part of the country subdivision, through the growth of cities, has transformed many farms into suburban properties. As for abandonment not much really useful agricultural land has been taken out of the census farm classification, but there are regions in which land so classed has been put to its proper use of growing trees. The country is interested less in the total number of farms than in the extent of production, and that is gaining even where the area cultivated is somewhat less. Comparisons are rather difficult here, for the production is not always of the same things as in past census years; but on the whole production is maintained regardless of the number of farms and it can readily increase whenever prices justify it.

REGULATION AND LIBERTY

AT Chicago last week Dr. John R. Mohler, Chief of the Bureau of Animal Industry, gave the representatives of the meat industry the idea that some kinds of government activity often considered interference with individual liberty are actually productive of greater freedom rather than less. He said that organization, standardization and regulation are working for the present and ultimate good of all concerned, and cited several instances to illustrate his point. For example quarantines necessary to control disease build up liberty from the hazards of disease. Freedom from disease is often bought at the price of restriction, but ultimately it means greater security and liberty for producers rather than less. He might have added that effective inspection means freedom from that suspicion on the part of the public which is so destructive to business. As some of the results of proper regulation and inspection he cited the fact that condemnations of cattle on account of tuberculosis are about half what they were four years ago and condemnations of swine materially less than half; that condemnations on account of hog cholera are about one-third of what they used to be; that condemnations because of tick fever are about one-tenth of the number twenty years ago; and that losses by spoilage are only a fraction of those suffered before inspection brought about research which set the meat industry free from this loss. All these benefits have been preceded by regulation of some kind which has often been opposed as interference with liberty. Maybe we can get a better understanding of the real meaning of regulation, and of liberty too, by viewing some things in the light which Dr. Mohler has shed thereon.

POLITICAL ADVERTISING

YEARS ago, under the above head, we published the following: "Experience has proved that the best and cheapest way

to acquaint people with the merits of any commodity or cause is to advertise it. Political parties have recognized this fact and in recent years have spent more money for advertising and less for brass bands. An instructive advertisement will reach hundreds of thousands of intelligent men and women, while a brass band will reach comparatively few and won't give them any information. Whether the cause be commercial, charitable, or political, advertising is a proper means of promoting it, for the written word must appeal to the intelligence and judgment of the reader rather than to his passion or prejudice. We presume that both political parties will want to present their cause and candidates to farmers this year. If they do our advertising columns are open to both of them on exactly the same terms. Our reading columns cannot be used by either of them under any circumstances."

The policy above expressed has been strictly followed and is in effect now. This year our advertising columns have been open to both parties and to all candidates as usual, and in this issue both parties present their cause and their candidates in paid advertisements. Every time we carry a political advertisement somebody fails to understand and accuses us of endorsing the advertising parties or candidates. This week, when both are advertising, is a good time to call attention to the absurdity of such a charge. For it is clearly impossible for anybody to endorse both.

THE OTHER HALF

WE think we know something, both by observation and by experience, about the uncertainties and difficulties of farming, something about the advantages and the troubles of those who follow it, something about the losses and the taxes as well as the returns in good and bad seasons. But we are impelled to wonder sometimes if those who live and work for a living on farms would not feel better about their own situation if they could know more about the trials of men in other business and other work; if they could see first hand in great centers of population the things we are compelled to notice and hear the tales that come to us at such a time as this. We cannot repeat these things at length here, though it would be easy to fill this paper with them. Suffice it to say that right now thousands of small business men, and some not so small, are uncertain about their ability to survive in business. They do not know what they can do in the future or even whether there will be a place for them in our shifting business world. Thousands of good mechanics are in the same position of uncertainty as to their future. Their present is unfortunately certain—they are out of work, their expenses going on and the landlord, the grocer and the butcher are helping them to live. Every employer now is overwhelmed with applicants for work. Every industry has labor enough and more. Cities, states and the nation are facing the problem of work for those who want it, and in some centers the problem of mere existence for thousands of those who cannot provide for themselves.

We do not believe in calamity howling, in making things worse than they are either in agriculture or in other lines of industry; but the facts are as we have stated and there is no escaping them. No doubt the readjustments now in progress will end in something better for most of the people involved, but they impose hardships now, not only in this country but in practically all countries. Let us recognize our good fortune if we are among those who are not involved in these readjustments in such a way as to endanger our business, or indeed our bed and bread.

New Jersey Farm Comment

By G. W. HARRIS

NEW JERSEY turkey producers are gathering at Samuel C. Lippincott's Springwood Farm, Burlington county, on November 1 to discuss mutual rearing and marketing problems. This is the first of the annual turkey days which were inaugurated in 1928 to be held in the county. Turkey growing for the eastern Thanksgiving and Christmas markets was at one time an important industry in New Jersey, but later disease in the flocks caused such serious losses that few producers in the state continued to rear turkeys. Commercial flocks of turkeys had become a thing of the past.

With knowledge of the better methods of poultry sanitation within recent years has come an increasing interest and better appreciation of profitable rearing of turkeys. Three years ago the first turkey day in the state was inaugurated in Monmouth county with the idea of helping revive New Jersey's once important industry. These meetings have been well attended, indicating that turkeys are again gaining favor on New Jersey farms. Judging from the large number of women at the turkey field days, farm women are largely responsible for this revival with their many small "pin-money" flocks throughout the state.

A large group of turkey enthusiasts is expected from all parts of the state to inspect Mr. Lippincott's flock of 400 pure-bred Bronze turkeys. Mrs. Helen Baker of Chestertown, Maryland, who owns one of the largest flocks of turkeys in the East, will open the morning program. This will be followed by other discussions on rearing and marketing and a demonstration on the dressing of turkeys for private trade.

THE turkey report from the Pennsylvania Department of Agriculture last week does not sound encouraging to eastern producers in spite of the fact that the turkey crop of 1930 for the country as a whole is about 3 per cent smaller than that of 1929, but larger than the 1928 and 1927 crops. A decrease of about 10 per cent is reported in the large commercial area from the Dakotas to Texas and westward, but the Pennsylvania turkey crop is estimated to be 10 per cent larger than last year.

MEMBERS of the New Jersey State Feed Dealers' Association met at New Brunswick this Friday morning for the final session of a four-day convention at the New Jersey Agricultural Experiment Station. The day program will be largely devoted to methods of purchasing and selling feed supplies.

LAST Tuesday evening I had the pleasure of attending a dinner sponsored by the Middlesex County Board of Agriculture and given to members of the New Brunswick Kiwanis Club. These gatherings were started by the Kiwanis Club with the idea of bringing the agricultural and city interests together with a better understanding of each other's problems. The farmers responded to the idea in turn by entertaining members of the Kiwanis Club. The result has been that these groups now meet twice each year, and although the meetings are largely social affairs, they form a much-needed connecting link between the city consumer and the farmer producer. The ultimate value of this cannot be estimated.

Every city guest left the dinner at Forsgate Farms last week with a better realization of the need for a consumer's knowledge of farm produce grades. W. W. Oley, chief of the New Jersey Bureau of Markets, briefly outlined the marketing systems for New Jersey produce and discussed quality and grades in reference to the consumer and producer. The value of grades depends on the consumer's knowledge and demand for quality.

State Poultry Convention

THE poultry show held at Asbury Park by the New Jersey Poultry Fanciers during the three-day convention of the New Jersey Poultry Association was a success in quality and size to that of the year. Over 1,000 birds were entered in the show this year compared to about 600 in 1929. "Mile-a-minute" title and a "Blue Bird" award were given to a beautiful female bird in the show was a "Blue Bird" award. The show was held at the Asbury Park Hotel. The show was held at the Asbury Park Hotel. The show was held at the Asbury Park Hotel.

breeder was named the "All-American Trio."

With 192 dozen eggs entered, this year's egg show was more than twice as large as the first competition held in 1929 when only 84 dozen were entered. Every New Jersey county was represented by the 110 poultrymen who showed eggs.

Paramount Farm, Eatontown, placed first in the producers class of eggs and in the commercial class. Ivin Knechel of the Lambertville High School won first award in the junior class. The carton class winner was Pearl Poultry Farm, Montvale.

The entire group of officers of the New Jersey State Poultry Association were re-elected for the coming year. They are Frank Makarius, Risley, president; John H. Weed, Vineland, first vice-president; Henry Rapp, Farmingdale, second vice-president; L. M. Black, New Brunswick, secretary; and



Herman Demme, Sewall, treasurer.

A. E. Jones, poultry specialist for the State Department of Agriculture, predicted "a greater and greater volume of New Jersey eggs will be sold by auction."

"The pioneer group to adopt the auction market for egg sales in New Jersey were the Toms River producers in Ocean county," he said. "They began operations on June 2 and auctions have been held twice a week up to the present time. The eggs were sold as packed by the individual producers and no state grades were used. A total of 3,707 cases of eggs was sold up to October 17, and the additional returns to producers over New York quotations were \$3,382.24."

"The Toms River group have moved their market to Newark and just recently have adopted New Jersey state grades for eggs."

"The second auction market was started at Flemington in Hunterdon county. Eggs sold at this market are packed according to state grades and they are state inspected. This auction met with immediate success because the prices paid in this locality have always been considerably less than those paid in more intensive producing areas. This auction started with 50 members on August 1 and up to October 17 more than 200 producers were selling their eggs through this market. A total of 2,608 cases of eggs have been sold and the producers have received \$3,590.88 in excess of the New York quotations."

After reporting that "a substantial percentage of poultry producers will lose money this year," Harry E. Lewis, president of the National Poultry Council, told convention members that "the depth of a poultry price has been reached."

THE poultry show at Asbury Park was a success in quality and size to that of the year. Over 1,000 birds were entered in the show this year compared to about 600 in 1929. "Mile-a-minute" title and a "Blue Bird" award were given to a beautiful female bird in the show was a "Blue Bird" award. The show was held at the Asbury Park Hotel. The show was held at the Asbury Park Hotel.

now available for commercial tests, according to announcement of the State Experiment Station and the Peach Council of the New Jersey State Horticultural Society.

This peach, known as New Jersey No. 66, is one of the new varieties developed at the Experiment Station, where extensive peach breeding experiments have been under way for more than ten years. It is an attractive, firm, white-fleshed freestone of good size, and it ripens during the first two weeks in August in most sections of New Jersey, or at about the same time the Carman ripens.

Trees of this new variety are offered to New Jersey growers for commercial tests in minimum lots of 25 trees. A circular containing details of the distribution of the variety may be obtained from county agents or from Prof. A. J. Farley, extension service horticulturist for the Agricultural Experiment Station at New Brunswick.

MANY New Jersey vegetable growers are now making plans for enlarging their present plant-growing facilities or for installing new ones. This planning is a result of wider recognition of the need for a larger number of better plants in the production of vegetables.

The size and location of these plant-growing structures should be governed by the use for which they are intended, advises C. H. Nissley, New Jersey extension specialist in vegetable growing. Before plans are drawn or actual construction work is begun, he explains, the kind and quantity of plants to be grown should be decided on. It is also important to know, he states further, whether or not the plants will be transplanted into beds, benches, flats, or pots, or moved directly from the seedbed to open ground. Recommended by the specialist is a sash greenhouse or hotbed, in which temperature may be controlled for starting the young plants, and cold-frame space where plants may be hardened before moving into the field.

"Because of their low construction, sash greenhouses, hotbeds and cold-frames should run north and south," Mr. Nissley says. "This arrangement will give the desired even distribution of sunlight. Since large quantities of water will be necessary to supply the demands of growing plants, ease of access to a water supply is important. Either natural or artificial protection should be provided from north and west winds. In planning the head house, boiler pit or fire box, provision should be made for ample space as a means of saving both time and labor."

MORE extensive use of insulating materials will help farmers to prevent extremes in temperature in poultry houses, dairy barns, hog houses, and storages for fruits and vegetables, advises Prof. E. R. Gross, agricultural engineer for the State Experiment Station.

Among the materials which have been found suitable for insulating purposes he lists granulated cork, cork board, sawdust, shavings, fibrous quilting, insulating wallboards, and compounds which upon pouring harden and become porous.

Professor Gross warns that some materials commonly regarded as being valuable insulators possess little or no insulating properties. The air spaces between studdings have practically no insulating value because their large size permits air currents within. Also of little value as insulators, he adds, are building paper, roofing paper, thin wallboards, sheet iron and sheet asbestos. Their slight insulating value is due only to the fact that they are airtight.

"Any material loses the major portion of its insulating value when wet," Prof. Gross says, "and even a slight degree of dampness impairs insulating properties. For this reason, all insulation must be entirely enclosed by a moisture-proof cover, such as a protecting layer of tar, pitch, asphaltum, asphaltum-impregnated cloth and building or roofing paper."

"Materials should be selected because of their adaptability. Insulating walls, roofs and floors for poultry houses, hog houses, and dairy barns. Granulated cork, sawdust and shavings are excellent for fruit and vegetable storage houses. The insulating wallboards when applied in sufficient thickness also are satisfactory for storages. In milk cooling tanks, cork board or insulating wallboards are best. In all cases, insulation must be especially applied to the roof and the walls. The chief feature of good insulation is to prevent the escape of heat or cold air from the space."



A filling station in the nineties.

Memories of a Hoss Trader

By J. A. BRANT



Intelligent and dependable.

I TAUGHT school for a number of years and finally grew tired of a job that brought so little in wages at that time and lasted for so few months in the year. In view of these facts I purchased a livery stable. I was raised on a farm and spent a good deal of time on the backs of colts and riding horses to plow corn and harrow. I always liked horses.

I bought this stable in 1893 and ran it, or it ran me, until 1898. Those were lean years, about as lean as those old Pharaoh dreamed about, as recorded in Egyptian history. Money was about as scarce as teeth in the mouth of a Leghorn hen. Prices of livery hire were low, but the prices of grain and hay were low in proportion. Oats could be bought for 25 cents a bushel and corn at 17½ cents a basket. I bought hay as low as \$4 per ton in the mow.

When I bought the stable a fellow known as "Reuben" had been in the employ of the former owner. He was a mighty good fellow and understood the business; was sociable, industrious and "quick on the trigger." Times were distressingly hard but Reuben had a way of his own to dig up a dollar where you would scarcely think there was one. He did it on the square, too. He stayed with me until I sold out at the end of the five years. The credit is his for keeping us out of the county home.

A Beautiful Bay—Light Behind

A man bought a beautiful bay mare—a pacer—at a public sale. He hitched her to a buggy and drove about two miles out of town when, perhaps, she thought she had gone far enough and she began to kick. The driver headed her for a board fence over which she made a high-class jump, leaving the buggy on one side while she was on the other. The fence was between them. He came back to town leading the mare, but the hide of neither would have been fit to hang in a tannery.

Here is where Reuben enters more particularly into the scene and I shall change the singular I to the plural we.

We had an old black horse—not a bad one—and while the fellow's blood was up to 212 Fahrenheit we traded. We hitched the mare once but not twice.

Next, we saddled a pair and started on a trading trip. We scarcely landed in a small town when an old soldier who lost a leg in the Civil War hailed us by raising a crutch and asked the all important question: "Anything to swap?" Reuben informed him that we did not wish to trade horses but would buy some cattle. We didn't want to be parties to getting the old man off the pension list.

A few minutes later we met an old friend on the corner who told us that the man who kept the hotel was a real jockey and a chronic swapper. We straightened up in our stirrups like cavalrymen and rode at a good pace right up to the old hitching rail in front of his panacea store. Things began to come our way. We patronized the joint by imbibing of a little of the weaker brand of his panacea.

We didn't have to wait long until he busted the ice and asked if we were inclined to trade, but Reuben, as spokesman, gave him a negative answer well rounded out. As was the custom he invited us out to see his horses. Among them was a little roan horse, a real beauty. In the mean-

time the friend we met appeared on the scene and acted as a sort of intercessor. We finally traded, using the time our victim had between selling his panacea to ailing customers.

The little roan was a single-footer, would shake hands, lie down at your bidding and do many things that made you like him. He was as near perfect as it is possible for a horse to be.

It rained that day, but the next day was fine. The landlord hitched the bay mare to a new buggy that cost a hundred bucks, and drove up and down the village, when all of a sudden Nancy must have thought it was time for an exhibition of her art and she kicked just three times at a cost to the landlord of thirty-three dollars and thirty-three and one-third cents a kick. But he acted the part of a good sport and came back for more action. We favored him, ate hot dogs together and laugh-



A good livery team.

ed until the clouds rolled by. We have means to recall over four hundred trades we made and some more that we have no means to recall.

Two men came to the stable one evening about eight o'clock, horseback, one riding a nice bay pony. He claimed he wanted a horse to work on a farm and we traded him a plug that stood us back the sum of three dollars and fifty cents. We tied the pony in a stall. He was there the next morning, but his new halter was a wreck. We tied him again, but again he went into reverse. We discovered the fact that he would stand anywhere untied.

We kept him for some time and used him for a saddle horse. You could dismount anywhere and walk off. He would neigh after you as much as to say, "I am still here." We hired him to a young fellow who wanted to call on his girl. He called nearly all night. The pony was there when he

made the last call, but some one who wished to do him a kind act tied the horse to a post and when the caller was about to start for home he was obliged by the girl's papa for the use of an old farm bridle to ride home. That horse made us good customers for the bridle and halter makers.

One afternoon in August, 1894, a man who met us in a trade came driving into the stable leading an old horse behind his cart and with his usual, "Hello, boys, anything on today?" We told him we were entirely out of trading stock.

"All right, give me a bid on the one behind the cart."

"Two and one-half."

"You own him."

I, not we this time, harnessed him and started for a gypsy camp. They had just pulled down their grimy tents and were leaving, but a big burly gypsy, black as a coal pile, was getting together a few tethered remnants of the herd. As I drove up he asked me if I wished to deal and of course, inclined to be truthful, I answered in the affirmative. He asked me to pick one out. I chose a bay horse, quite thin, with a white face and three white legs to the knees and not a blemish to be seen on him. We changed harness and the gypsy took the lines. That horse could go like a wildcat with forty hounds after him, but after a distance of three hundred yards you could have heard him blow like a foghorn. He had wind to spare. The gypsy told me to pick out another one, that I would be arrested if I took the wind-broken into town. I told him to get out of my buggy, that I was in a hurry to get to town, stuff sponges in that horse's nose, stop his roaring and bet on his speed. This speech only made him worse and he insisted I should pick out another.

The Frisky Sorrel Mare

I selected a sorrel mare if he would hand me the whip he held in his hand. He did after some hot words from both sides and we changed harness again. My animal could have got along better with a crutch when I started, but the farther the better and the farther the faster and the harder I held to the reins the more speed. She was good enough to get for nothing but had been better.

"Shorty" was another noted character, who at times became endowed with the spirit of swapping. Shorty and I traded in the evening, at midnight, at the cock crowing and in the forenoon. It was neither day nor night with us. We were apt to be in circulation all hours. A good meal of ham and eggs or pork chops didn't have the snap of a horse trade.

He and I started for Somerset county with an eight-dollar sorrel mare and the usual intention. We heard of a pair of old maids who had a little sorrel mare that was too frisky for them and deadily frisk had entered their souls. They were anxious to trade if our horse wouldn't kick or run off. This made us think they would do both. We cared as little.

They lived on a hill and to prove the pudding we loosed the holdback straps and drove our horse down the hill, the points of the shafts out past his ears and the buggy against the horse. We traded. It was tail for tail, but we gave them a five-dollar gold piece which we thought was really due them. (Continued on page 12.)



A stylish turn-out thirty-five years ago.

John Imberlay, Trustee

By Homer Green

Copyright, 1903, by Perry Mason Company, Boston, Mass.

ROBERT rose to his feet, leaning heavily on his cane. "Well, mother," he said, "we can do nothing more here. Let's go. If anything unexpected should happen so that we can raise the money within ten days, Mr. Imberlay, we will let you know."

The widow now rose in her turn, and moved with Robert toward the door of the room. Then the banker swung round in his chair for a parting word.

"I'm sorry I can't accommodate you," he said, "but my first duty is to the trust, and that duty is imperative. Good afternoon!" He turned again to his desk, his papers and his books.

A moment later Stewart came to the door to say that the cause of the discrepancy in the day's balances had been discovered, and the error corrected. At Mr. Imberlay's request he entered into a detailed explanation of the manner in which the mistake had been made; but as it appeared to be due to no particular inadvertence on the part of any of the employees, there was little occasion for criticism.

Nevertheless the troubled look remained on the face of the president. He went to the vault, opened his private box, and took from it a parcel marked "John Imberlay, Trustee." From this parcel he selected the Leighton mortgage and read it over carefully. Then he examined a small map which had been folded and filed with the other papers. As he appeared to be in some doubt concerning the matter, he called one of the clerks into his room.

"William," he said, "I believe you are somewhat acquainted over in the Broad Valley region?"

"Yes, sir; I ought to be."

"Do you know where this Leighton place is?"

"Yes, sir, very well."

"Who adjoins it on the north?"

"Why, up along the main road the Fanning farm is next."

"Well, then, on the east?"

"On the east it's this way. The Leighton farm is on the corner, and next to it, along the cross-road, is that little place of Rafe Orchard's."

"I see. And how much is there of that?"

"Oh, not more than two or three acres and a little old house."

"What does Orchard do for a living? Or doesn't he have to work?"

"Why, he's poor enough, I guess. He does most anything that comes handy. He's a sort of Jack of all trades. He's been helping the Leightons a good deal this spring, on account of Mr. Leighton's illness."

"Pretty good neighbor, is he?"

"Best in the world, they say. He's been a sort of good angel to the Leightons. Sat up nights with Mr. Leighton, I hear."

"By the way, do you know this Leighton boy? What's his name?"

"Robert. Oh, very well! He's younger than I am, but we were in the high school together for a while."

"What kind of a boy is he?"

"First rate," said the clerk, with some enthusiasm. "He's smart as a whip and clean as a whistle. There isn't a better boy in that section, but his lameness is quite a drawback to him."

"I see. Well, we're getting off the subject. What amount to get at is the value of that Leighton place. The trust holds a mortgage on it for two thousand dollars. Is it worth the money?"

"I should think so, if it's kept up. It's run down considerably now on account of Mr. Leighton's illness."

"Well, there's two years' interest due on the mortgage. Do you think the widow and her son can raise that money?"

"Let me see. That's two hundred and forty dollars. They'd have hard work to do it without stripping the place. I don't believe they've got any money, and they'd find it difficult to borrow it. But what they're honest enough, but people who lend money want pretty good security, and they can't give it."

"I see. Well, I suppose I'll have to foreclose. That's all, William. That's about what I wanted to know."

Once more the banker turned to his desk, and William went out into the counting-room.

The big bank doors were already closed and looked for the day, but the employees would be busy as usual, yet, completing their day's work. The hands of the clock moved slowly, as clock hands move a way of doing on fine afternoons in June; but before the hour of five was reached the clerks, one by one, had closed their books, laid them away in the vault, taken their hats, and gone out into the beautiful sunshine and sweet air. Besides the ever faithful janitor, only the president and cashier were in the bank.

"Don't wait for me, Mr. Ridgebury," said the president. "I will close the vault when I leave."

He did close the vault when he left; but that was not until nearly two hours later. In the meantime he had pored over the books and papers of the trust. He had walked the floor in deep meditation. He had taken up his map and examined carefully the outlines of the Leighton farm and of the poor little possession of Rafe Orchard that adjoined it. Once he exclaimed aloud, and the janitor, waiting in the lobby, was startled at the sound of his voice: "The trust must be closed. Justice must be done though the heavens fall. And," he added, with a grim smile, "they will surely fall."

When at last he put his books and map and papers away, and closed the vault door upon them, he still bore the look of a man in deep perplexity, a man dissatisfied with himself, struggling with his conscience, unable to free himself from an environment which galled him.

As for Mrs. Leighton and her son, their homeward journey through that beautiful June afternoon was anything but a delight to them. There was no effort to hurry the old family horse, as, hitched to the market wagon, he jogged steadily on. Neither Robert nor his mother took any note of the beauty of the Wyandott River, fed by recent rains and flowing full from shore to shore, down the east bank of which they were travelling.

Their minds were too fully occupied and their hearts were too heavily burdened with their troubles to appreciate, or even to think of the beauty that surrounded them. How it would all end they could not yet foresee; but this much appeared to be certain, that sooner or later they must leave the old farm that had been such a dear home to them both.

They were agreed that it would be useless to try to raise the money to pay the interest due. Only a miracle could place that money in their hands. They must try to find a purchaser for the place who would pay them more for it than the amount of mortgage and interest due, so that, if possible, a little might be saved from the wreck.

Failing in that, they would simply have to wait quietly the inevitable foreclosure and sale.

The Cheerful Plowman



NO PLANS

THERE goes Mark Reemer's youngest son, a chap, I think, of twenty-one—a chap, poor lad, without a plan, no program that becomes a man! He does not like to till the soil, he is not built for heavy toll, his mind and make-up, that is clear, do not fit in with duties here; a curdy-comb or garden plow, a pig, a hay-stack, or a cow have no romance for such as he, they have no pull on him, you see.

Give him a pitchfork or a hoe, he'll do his part. I'll have you know, he'll work without a sign of shirk, yet find no pleasure in the work. He's real unhappy, that is plain, he's discontented, sick of brain, he's weary of the round of life, he has no interest in the strife.

"What would you be?" Old Mark will say. "If you are sick of forking hay, of feeding calves and milking goats, of shocking wheat and threshing oats? Speak up and make your wishes known, don't sit around and dream alone. What is it you would like to do? Just name the stuff, I'll help you through. But, if you cannot frame a plan like any other normal man then don't bring up your troubles here, but take this rope and tie that steer, go help the men at forking straw. One thing or tother, that's the law. Speak up and say what you would do, and I am here to help you through, but if you can't then grab a hoe and help to make the currants grow."

Well, Mark is wrong. He's wrong as sin, he has no tender strain within. A father's duty, I would say, would be to watch from day to day and study out when kids are small, before they grow so old and tall, just what they may be fitted for, the plow, the office, or the store. It's wrong to pile upon a lad the duties of himself and dad, it's wrong to make him choose alone the work he'd like to call his own; the dad should help him pick his niche with kindly words, not with the switch. H. E. T.

Both of them knew Mr. Imberlay, by reputation, to be unyielding and merciless, and they knew that, having received his ultimatum, they must abide by it. Nor did either of them find undue fault with him. He was clearly within his legal rights, and they had exhausted theirs.

Yet Mrs. Leighton could not wholly suppress her feeling. Once or twice she spoke bitterly of what appeared to her to be the unnecessary hardship which was being forced upon them, only to have her complaint checked by Robert, who sought to divert her attention from the irretrievable past and the unhappy present by laying plans for a brighter future.

So they made their way toward home. In the deep shadows of the maples the white farmhouse looked very peaceful and very pretty to the tired and troubled woman who descended from the wagon at the gate. And it gave her heart another wrench as she thought that possibly this might be the last time she would ever come to it from abroad and enter it as her home.

Dick, the younger of her two boys, was waiting for her in the road, and through the open kitchen door she caught a glimpse of a white dress moving quickly back and forth inside.

"Who is it, Dick?" she asked.

"It's June," he replied. "June Orchard. She came down about an hour ago to get supper for you. She said she knew you'd be all fagged out when you got home."

In the big sunny kitchen the table was spread with its white cloth and fully set for supper, while from the stove at one side of the room came the refreshing odor of simmering food and steaming coffee.

"June Orchard, you're an angel!" The sixteen-year-old girl stood, with arms akimbo, looking merrily out of her brown eyes at the tired and astonished woman.

"Now Mrs. Leighton," she exclaimed, "do I look like an angel? I've been to town myself, and come home all tired out and had to get supper, and I know what it means. Good-by, Mrs. Leighton! Everything's ready; only I didn't take the butter and cream out of the ice-box. Nothing on the stove'll burn till you get your things off and get refreshed up a bit. I'll be down to-morrow. Good-by!"

Brighter and sweeter than the June sunshine she ran down the steps, along the path, out at the gate, and up the road toward her own home, a quarter of a mile away. Dark-eyed and fair-haired, with supple figure and elastic step, with the happiness that a good deed brings shining in her face, she went singing on her way.

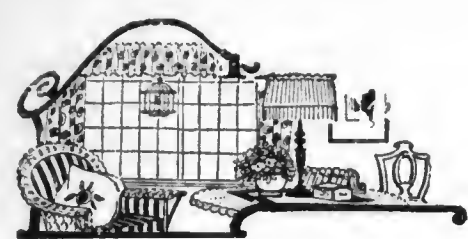
DURING the ten days following their visit to John Imberlay, Mrs. Leighton and her son, Robert, made many vain efforts to find some feasible plan for keeping their farm. The thing did not appear to be possible. They heard of a man who had money to lend, and went to him to see if he would take an assignment of the mortgage from Mr. Imberlay and extend the time for payment. The errand was fruitless. A similar visit to a man in Briery resulted in the same way. Men who have money to lend do not take kindly to the idea of putting it in a mortgage to the full value of the property, with two years' interest due.

For two days in succession Robert scoured the country, trying to find some one who wanted to buy such a property as theirs, and who would give more for it than the amount of the mortgage. His search was absolutely without success. As for borrowing the two hundred and forty dollars due for interest, that also was out of the question, since they had no security to give for the loan. And there was no one to whom they dared apply for a favor of this kind without offering adequate security.

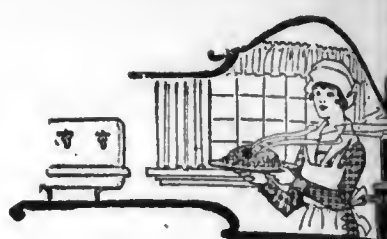
Robert suggested one day, in a spirit of grim humor, that they ask Rafe Orchard for the money. Poor Rafe! He would cheerfully have given them ten times that amount if he had only had it to give. Indeed, he would have given them the coat from his back, or the shoes from his feet, if that would have helped them in their distress. But he himself lived on what he could earn from day to day when the inspiration for work had hold of him. And there were long intervals when the beauties of nature, or the love of literature, or the artistic instinct so appealed to him that his hands and brain could busy themselves only with the fulfillment of poetic visions, or the carrying out of impracticable plans of culture for himself and his daughter June.

Yet he was no idler. His hands or his brains or both were always employed, even though the results of his labors were so much of the time without practical value.

(To be continued.)



The Farm Home



Home Education

By JANETTE STEVENSON MURRAY

"I WANT all the children who drank a glass of milk for breakfast to stand up," said the kindergarten teacher.

Six out of a class of twenty-five stood up. The teacher shook hands with these six and made quite an ado over them. Receiving so much attention and hearty commendation made these children feel that they occupied the center of the stage. Nothing could have delighted them more.

The children who did not drink milk for breakfast sat unnoticed. "The waters closed over them," so to speak. If, instead, the teacher had said, "Why, Teddy Smith, think of your not having a glass of milk! I'm certainly surprised." Teddy would have enjoyed the attention he gained through the reproach.

The next morning when all the children who had drunk milk for breakfast were asked to stand, almost every child got up. This kindergarten teacher thoroughly understood the teaching of child psychology, that it is good procedure to praise the desirable act and ignore the undesirable.

The best schoolmen, today, do not ask the child to correct misspelled words, badly punctuated or ungrammatical sentences—the old grammars were full of these exercises—instead, they

place the emphasis on the correct word and sentence, so that the child gets a mental picture of these and forgets the incorrect. They give the child positive suggestions instead of negative. They know that if we call Jack a gentleman, he will instinctively straighten up and brush his clothes, but if we call him a "tough," he will slouch down and scowl at us.

The mother who is an up-to-date disciplinarian talks about how well Bob remembers to remove his cap and to fold his napkin. She calls attention to his shoes upon the rare occasions when they are polished, commends the orderly arrangement of Jane's bureau drawers, always says "Thank you" to her high school son when he gallantly seats her at the table.

Direct Their Play

And the father who is quite up to date in this important science says within Bob's hearing that it is time to have the walks shoveled so promptly. This provides a stronger incentive towards future effort than nagging. Father also expresses enthusiasm over the lad's progress in school—the gain may be slight but Bob feels encouraged and the chances are good for a higher grade on the next report card.

Clara's mother belongs to an old school that still has too many followers. She pursues the opposite course. She is always finding fault because her conscientious little daughter does not stand among the highest in the class. Clara is becoming nervous, sheds bitter tears, and refuses to eat. The child is physically unfit for good school work. Last semester her grades were lower than usual. Clara needs commendation rather than upbraiding.

Never take away a harmful amusement without substituting something equally interesting in its place. Jean's mother like Clara's was not up to date. Four-year-old Jean was digging in the dirt a very healthful and natural activity. Her mother stopped her because she was soiling her dress. Jean fretted and got into so much mischief, her mother was almost "beside herself" before the afternoon was over. There would have been no trouble if Jean had been dressed in overalls and provided with a sand box. Wisely selected toys and play equipment prevent naughtiness.

Bossy, obstreperous, and difficult children are often changed entirely when the parents stop nagging—stop saying, "Don't do that!" at every turn—and provide for them big building blocks, a jar

of clay for modeling, or a work bench and tools. These things help children to use any over abundant energy and initiative in constructive work. Nat'l Kindergarten Ass'n.

Old-Fashioned Gingerbread.

LATE fall and early winter are gingerbread seasons. We like the old-fashioned gingerbread which is light and moist and dark in color. The following is a never-failing recipe given me by a friend in whose family it has been used for three generations:

One cup molasses, one cup brown sugar, one cup sour milk, one tablespoon butter, one teaspoon soda, two eggs, one tablespoon ginger, two cups flour.

Beat together sugar, molasses, butter and eggs. Add sour milk into which soda has been stirred. Then add flour and ginger which have been sifted together. Mix well. Bake in moderate oven 35 to 40 minutes.

This gingerbread is delicious served with whipped cream. Better still, split the bread as you would a shortcake, spread sliced bananas and chopped nuts between the layers, cut in individual squares, top generously with whipped cream, add a cherry, and you have a dish fit for the king.

Marguerite McCreary.

National Book Week

By GERTRUDE S. STEWART

THE American Library Association has completed several book lists which I certain may be useful among our readers. One that grips my greatest interest is a reprint from a story by Will Durant on "One Hundred Best Books for an Education." He promises to whoever devotes one hour a day for four years this selection of books will become both a scholar and a philosopher. Let's try that!

Books enjoyed by young folks and liked by the elders are listed in a group called "Thirty Books for Young People." You will surely want them if there are growing children in your family.

"The Parent's Bookshelf" is a list designed by the A. L. A. to help fathers and mothers with training problems. This selection includes books to help us with not only the child's mental, social and physical growth, but with his work, play and good manners, as well. The National Congress of Parents and Teachers worked with the library in compiling this list.

Often we are puzzled what books to buy or what to read for our children. This problem is ably solved by the "Graded List of Books for Children." There are more than a thousand books

classified according to the ages of children in the first nine grades of school. What a wonderful help a list is for the busy mother.

Which lists do you wish us to send you? They are yours for the asking. Address your requests to Home Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

County Libraries are growing numbers in many sections of the state, and we hope that before long will be as easy for the country child to secure splendid books as it is for his city cousin. If your county has no special project in mind this new year, what finer achievement could be mastered than to arouse your own county in the need for a library?

In the meantime, let us mail you the book lists to keep you up-to-date. Address your requests to Home Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

Cooking Vegetables

A NEW edition of "The Art of Vegetable Cookery" has been issued by the New York state college of home economics at Ithaca.

This 57-page pamphlet contains a discussion of the value of vegetables in the diet, and tells the effects of cooking and tabulates the comparative content, in vitamins, of the most commonly-eaten vegetables.

The bulletin also contains about two hundred recipes for cooking about fifty different vegetables. The recipes tell how to serve various vegetables in many forms, such as soups, salads and desserts. All of the recipes have been thoroughly tested by authors. Of these authors, Faith F. and Lucile Brewer, Miss Brewer is particularly well-known to homemakers of New York state because she has personally made many friends and acquaintances among them through her demonstrations in the preparation and serving of foods.

A copy of the bulletin may be obtained from the office of publication, Roberts Hall, Cornell University, by asking for bulletin E. 178.

The attractive and artistic wrapping papers the market may be used to make decorative covers for desk files, portfolios and handy boxes.

The year-old baby should have a yolk of egg day to help supply its need for iron. Straw prunes and spinach and whole wheat cereal also sources of iron.



A Doll for Baby

SOME time Santa has been very busy preparing these dolls for the young folks and with a little help from these attractive designs will make thousands of children very happy.

The material is a lustrous rayon fabric and after embroidery is done, the dolls will make the baby's eyes water and its little arms will reach eagerly for this bright and shiny toy.

The stitching on front and back can be done in a few moments. Then sew on to front and fill with rags or cotton baten and the doll is made.

When finished they are 16 inches high. No. 3001, Robin Hood, is maize; No. 3002, Baby Doll, is rose; No. 3003, Popsy, is tangerine; No. 3004, Bunny, is blue; No. 3005, Kitty, is green. Each design can be had in the color only.

Each doll is stated with each number. Price, when paid, is 25c each or \$1.00 for the envelope. If you cannot buy books let the libraries of your state or county help you.

County Libraries are growing numbers in many sections of the state, and we hope that before long will be as easy for the country child to secure splendid books as it is for his city cousin. If your county has no special project in mind this new year, what finer achievement could be mastered than to arouse your own county in the need for a library?

For the Mature Figure

HAVE been making dresses that suit the mature figure to perfection and in this article the good points of these dresses will be described.

One of light-weight wool fits smoothly, but the back of the bodice seems slightly, which, to my mind, is appropriate for those of us who are not so slender as we once were. The inner bodice-back of thin silk goes to the neck, shoulders, and arms, and holds this fullness in place. The dress of both skirt and bodice show diagonal closings and, altogether, the effect is most pleasing.

In the dress mentioned the waist has been dropped to the top of the hip bone. The sleeves of the dress are new. They are rather straight with a mitred band at the wrist and a button links—a tailored effect that goes into the trimness of the costume. Of course, there is the necessary bodice dress. This is of a silk and wool material—a tiny white fleck on a dark ground. The tunic is semi-fitted, has a surprise closing, and buttons all the way to the hem on the side-front. About six inches of length shows and this is slim and elegant. I am using the same material for both tunic and skirt, but a combination would be just as acceptable.

A third costume is of wine-colored crepe and a low-backed peplum. It is featured on the skirt. The bodice has an interesting diagonal crease, really a continuation of the edge of the peplum, which meets at the side front waistline. The skirt has a deep V-neckline, and flared cuffs.

When washing silk garments do not wring dry. Fold the garment in wash towels and pat out the moisture.



Let's all try
the wake-up food
for quick new
energy!

All together! Mother—father—youngsters—oldsters! Pick up spoons and dip into the crisp, golden wake-up food. Post Toasties! Quick new energy in delicious form! Easy to digest—quick to release its stored-up energy to the body. Richly flavorful—easy to serve. Heap it up—golden, oven-fresh flakes in cool, nourishing milk or cream. Mingle it with fruits or berries in season. Gloriously good—for breakfast—for lunch! A wake-up food the whole family enjoys. And serve Post Toasties often as a wholesome supper "bite." How good to have the wake-up food always in the house! Order Post Toasties now!

POST TOASTIES
The Wake-up Food
A PRODUCT OF GENERAL FOODS CORPORATION



Quick New
Energy

© 1930, G. F. Corp.

The rewards of good judgment

Two yards of homespun fabric for a keg of salt! A quarter barrel of corn-meal for gunpowder and shot! In the regions beyond the Ohio settlers were bartering their produce for the trader's goods, for staples, for necessities of life. Each transaction required personal judgment. The buyer became at once a seller. Whether he drew the best of the bargain depended on his ability to match worth with worth.

Times have changed. Disposing of your crops, your livestock, your produce is one problem. Procuring machinery, fertilizers and supplies for the family's daily wants, is quite another. You get cash for what you sell and pay cash for what you buy. Yet proper buying now, as ever, depends on the correct interpretation of values.

And the easiest way to decide what anything you need is worth—tractors, automobiles, radios, soap, furniture, household goods and the like—is to become a persistent reader of advertisements in reliable and reputable farm papers and magazines.

Only goods which the public has accepted as worth their price can be persistently advertised. If you see a product continuously advertised, you can rest assured that it has the public's approval. The advertisements will honestly tell you what a product will do. When you are ready to buy—although at an indefinite time in the future—your judgment as to the value of the advertised product will be sound and will mean money in your pocket.

Read the advertisements in this farm paper . . . they mean safer, better buying for you.

A Modern White Light-Like Sunlight

for the Oil-Lighted Home



With this **NEW INSTANT-LIGHT ALADDIN** KEROSENE Mantle Lamp

HERE'S good news for all homes that use oil for lighting. This new Aladdin makes it possible for them to have light of even better quality than electric and at less cost. It is also over four times as efficient as the best open flame lamp—saving its cost in a few months.

This Modern White Light of a quality next to sunlight from kerosene is a modern miracle. Homes come dark and dingy now made bright and cheerful. Over seven million people enjoy its comforts. Note the many desirable features.

Ask Your Dealer
If your dealer cannot supply you write us for full information.
Mantle Lamp Company
609 W. Lake St., Chicago

DOWN Goes the THERMOMETER

Indersa **COLDPRUF** KNIT SLIP keeps You Comfortably Warm

There's no reason for not being warm even in the coldest weather. When you wear an Indersa Knit Slip, you are protected by a special process that keeps warmth in and cold out. Knitted with a patented border that prevents riding up around your hips and bottling between your knees. You can wear an Indersa underneath your smartest dress. It fits without a wrinkle. Indeed, if it weren't for its comfortable warmth you wouldn't know you were wearing Indersa. Furnished with STAY-UP shoulder straps that always stay up. Indersa comes in a wide variety of colors and color combinations. Fast colors that won't fade even after repeated washings. Ask your favorite store to show you Indersa in wool, rayon, and cotton, wool, wool and cotton, and cotton, wool, rayon, rayon and cotton. For women, misses, children. But be sure you see the Indersa label for Indersa is the ONLY Knit Slip that COLDPRUF cold weather slip.

Send for FREE Style Folder No. 55 in color. Please mention dealer's name and address.
INDERSA MILLS CO.
Winston-Salem, N. C.

42-PC. DINNER SET GIVEN

SEND NO MONEY. WE TRUST YOU. Just send me address and I will send you this beautiful 42-PC. DINNER SET. It includes 12 place settings of 35 pieces each. This is a beautiful, modern dinner set. It is made of the finest porcelain and is completely new. It is a real treat for you and your family. Write for it today. The Perry G. Mason Co., P.O. 645 Cincinnati, O.

QUICK RELIEF RHEUMATIC PAINS JAPANESE OIL

Rub antiseptic Japanese Oil on aching spot. It penetrates to the joint, drives out pain QUICK. Won't blister like old type liniments. 40 Years Success. At drugists.



Winter Brings New Styles

No. 6269.—Girls' Coat. Cut in four sizes: 2, 4, 6 and 8 years. A 4-year size requires 17 yards of 51-inch material. To face collar, cuffs and revers portion of the fronts with fur or fur fabric, will require 1 1/2 yards 6 inches wide. Price 15c or two for 25c.

No. 6998.—Ladies' dress with large hips. Cut in eight sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 46-inch size requires 5 1/2 yards of 39-inch material. Price 15c or two for 25c.

No. 7007.—Misses' dress. Cut in three sizes: 16, 18 and 20 years. A 20-year size with sleeves and collar will require 4 1/2 yards of 39-inch material. Vestee of lace requires 1 1/2 yard 6 inches wide. Price 15c or two for 25c.

No. 6586.—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. To make dress with sleeves and small collar will require 2 1/2 yards of 35-inch material for an 8-year size. bolero and with long or short sleeves, requires 2 1/2 yards 35 inches wide. Price 15c or two for 25c.

No. 7020.—Girls' dress. Cut in five sizes: 4, 6, 8, 10 and 12 years. To make dress with sleeves and small collar will require 2 1/2 yards of 35-inch material for an 8-year size. Price 15c or two for 25c.

No. 7017.—Girls' dress. Cut in six sizes: 6 months, 1, 2, 3, 4 and 5 years. A 2-year size with long sleeves requires 1 1/2 yards of 35-inch material. Price 15c or two for 25c.

No. 6734.—Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. An 8-year size requires

2 1/2 yards of 32-inch material. For contrasting material 1-3 yard is required 32 inches wide, cut crosswise. Price 15c or two for 25c.

No. 5234.—Gymnasium or camping costume. This model may be developed in flannel, poplin, jersey, balbriggan or khaki. The pattern is cut in five sizes: 8, 10, 12, 14 and 16 years. To make the suit view requires 4 1/2 yards of 30-inch material. Price 15c or two for 25c.

No. 7020.—Ladies' skirt. Cut in six sizes: 26, 28, 30, 32, 34 and 36 inches waist measure. A 26-inch size (of one material) will require 3 yards 39 inches wide. The foundation portions of lining requires 1 1/2 yard 32 inches wide. Price 15c or two for 25c.

No. 6492.—"Peter Rabbit" and his winter suit. Pattern includes "doll" and garments and is cut in three sizes: Small, 12; medium, 16; large, 20 inches in length. A 12-inch size requires 1 1/2 yard for the "doll" and 1 1/2 yard for the jacket and overalls. Price 15c or two for 25c.

No. 6441.—Ladies' apron. Cut in one size—medium. It requires 1 1/2 yards of 40-inch material, together with 8-13 yards of bias binding put on as illustrated. Price 15c or two for 25c.

HOW TO ORDER
Write plainly, giving pattern number and size. Address: Pattern Department, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.



Guard Your Health... wear BODYGARD

Be safe, comfortable and happy this winter. Outfit the family with smart, durable BODYGARD Underwear.

A style and weight for everybody's need. Long lasting, and tailored for true comfort.

UTICA KNITTING CO.
UTICA NEW YORK

Springtex
UNDERWEAR
A fine ribbed garment with springy texture.

VELLASTIC
UNDERWEAR
Elastic knit fabric with silky inner fleece.

Ask to see the "Utica-Knit" Sleeper for your children's protection.



Best Remedy for Cough Is Easily Mixed at Home

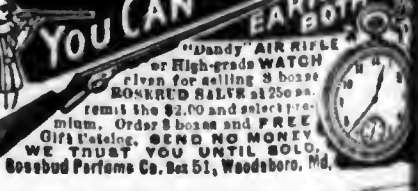
You'll never know how quickly a stubborn cough or chest cold can be conquered, and try this famous recipe. It is used in millions of homes, because it gives more prompt, positive relief than anything else. It's no trouble at all to mix and costs but a trifle.

Into a pint bottle, pour 2 1/2 ounces of Pine-X then add plain granulated sugar syrup (strained honey to make a full pint). This two-thirds of the money usually spent for cough medicine, and gives you a purer, better remedy. It never spoils, and tastes good—children like it.

You can actually feel its penetrating, soothing action on the inflamed throat membranes. It also absorbed into the blood, where it acts directly on the bronchial tubes. At the same time, it promptly loosens the germ-laden phlegm. This three-fold action explains why it brings such quick relief even in severe bronchitis, coughs which follow cold epidemics.

Pine-X is a highly concentrated compound of genuine Norway Pine, containing the active agent of creosote, in a refined, palatable form, and known as one of the greatest health agents for severe coughs, chest colds, and bronchial troubles.

Do not accept a substitute for Pine-X. It is guaranteed to give prompt relief or money refunded.



PINE-X
for Coughs

PLEASE say: "I saw you adv. in Pennsylvania Farmer."



Tractor and two two-row cultivators caught in the act of making a sharp turn on a 20 per cent grade in loose gravel soil, Berks county, Pa.

Garden and Truck Crops

By GILBERT S. WATTS

THE advantages of cold storage for keeping many fruits and most vegetables are quite generally recognized. Yet the relative expense of constructing cold storage, together with the fact that such space can be utilized throughout only a portion of the year on most farms, makes it difficult for many growers to secure cold storage facilities. Near the larger cities the problem is not so difficult. Commercial cold storage space usually may be rented by the enterprising grower. In certain specialized shipping districts extensive cold storage houses have been erected. But the growers for local markets in our numerous small cities and large towns, and whose production in the total looms very large, are not so fortunate in this respect. In most instances they must depend on common storage in special houses, attics or cellars and on burying. Which methods we must admit are highly successful in the hands of experienced and painstaking management.

Ice-Plant Storage

Still there is possibility of securing small-scale, economically practicable cold storage that is open to a great many growers. This is the local ice plant, one or more of which are to be found in nearly every town having a population of a few thousand. The majority of these establishments have cold storage rooms in addition to ice making equipment.

As a rule one room is much larger than the other and is used to store a reserve of ice that is drawn upon during very hot periods when daily demand exceeds manufacturing capacity. In many instances this larger reserve may be safely sold out during the latter part of September, after which the reserve that can be carried in the smaller room should be adequate. Thus the larger room can be released for cold storage purposes at the harvest for winter sales begins.

In this way we have secured quite satisfactory cold storage the past two seasons. The management problem of getting everything put away in time has been greatly simplified because we can begin storing crops that are ready several weeks earlier than would be safe with common storage on account of the possibility of unreasonably warm weather.

Reasonable Cost

In addition we find that the storage cost is no greater than that of crops connected with burying. Burying crops from the storage room, however, is much easier to remove crops from the storage room. Crops as lettuce, spinach and cold storage.

This fall we first filled up with tomatoes, pumpkins, eggplants and beans, and then frost came. In a few weeks

these crops had been moved out. Now cabbage, beets, carrots, spinach and celery are going in.

A few precautions are in order. First we should remember that no crop can come out of any kind of storage in better condition than it went in; natural ripening excepted. Only first-class products can earn their way. Most vegetables keep better when harvested while the foliage is dry. Rough handling, bruising, should be avoided. Provision must be made for air circulation by means of raised, slatted floors and piling that will let air move between packages. Temperatures in most cases should be kept at 32 to 34 degrees F.

Cover Crops

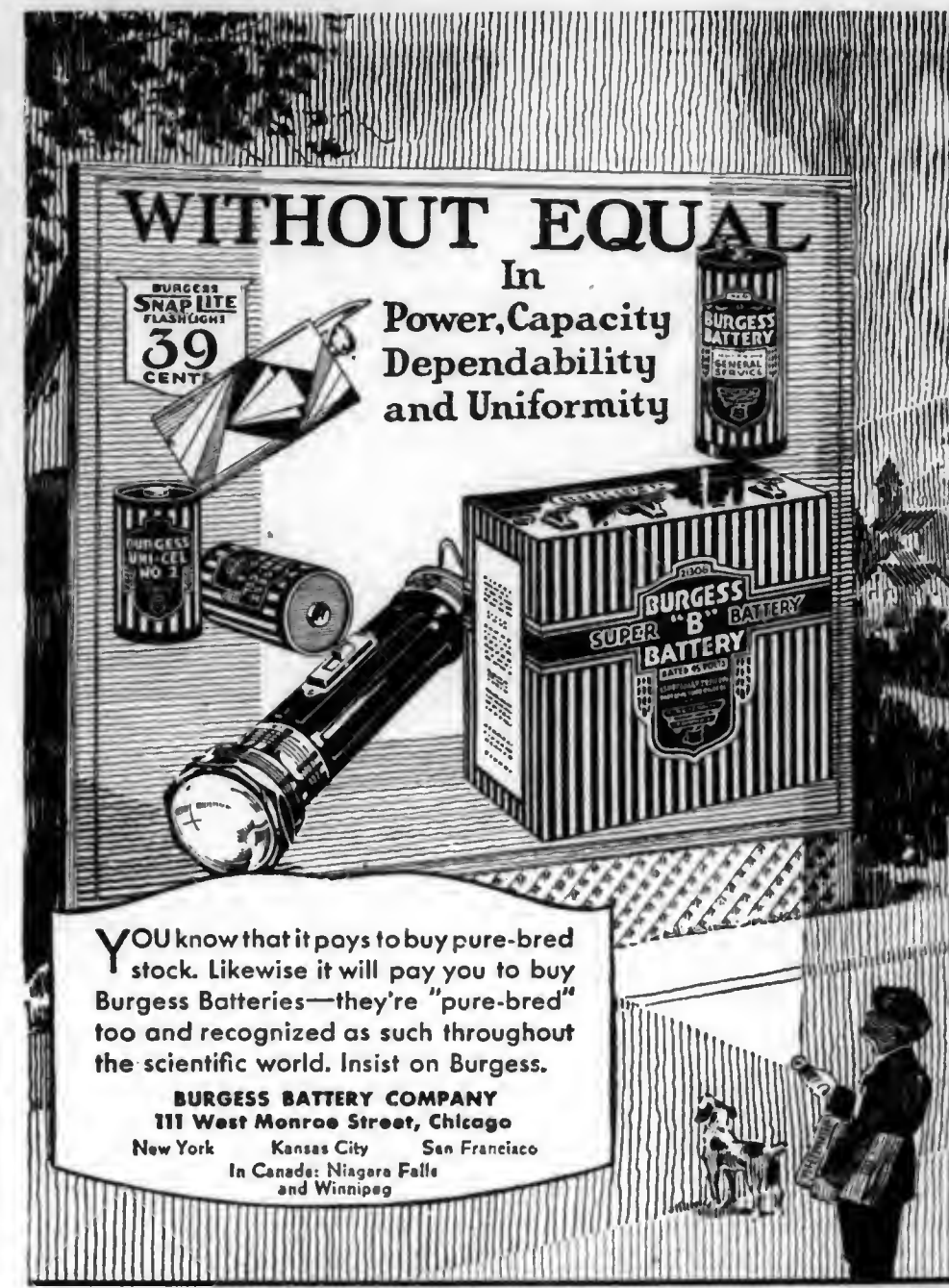
RECENTLY I took an evening to study the printed reports of the meetings held last winter by horticultural societies of several states. At some place in almost every volume I found "Lime and Organic Matter" as part of the topic discussed by prominent horticulturists and soils scientists. The importance of these factors seems to be equally great in both fruit and vegetable growing.

Of course these are old subjects. But interest seems to be increasing rather than diminishing. Decreasing supplies of manure have forced countless growers to dependence on other aids to the maintenance of fertility. I wish I could present in a few lines the "meat" of the discussions I have just read. But cover crops, cover crops, and more cover crops, at every opportunity, plus lime as needed and the intelligent use of commercial fertilizers seem to be considered the "secret" of keeping the soil fit to make the kinds of yields that put money in the bank.

One prominent grower said, "My experience with cover crops is that if you use cover crops and lime along with your commercial fertilizer you can keep growing vegetable crops on the same land year after year as long as you want to."

Another grower reported that soil into which a heavy crop of vetch had been plowed produced a larger yield of tomatoes than an adjoining strip that received 20 tons of manure per acre.

A very successful Jersey grower uses Sudan grass and sunflowers as summer green manures. He says, "On a tonnage basis, I think, sunflowers will get you more organic matter in a given period of time than any other crop, although the Sudan grass is a close second." This in warm weather of course, for both these plants are sensitive to cold. He plows them down when about two and a half feet high. That is while they still are succulent, not woody. Thus quick decomposition is assured.



WITHOUT EQUAL
In Power, Capacity, Dependability and Uniformity

YOU know that it pays to buy pure-bred stock. Likewise it will pay you to buy Burgess Batteries—they're "pure-bred" too and recognized as such throughout the scientific world. Insist on Burgess.

BURGESS BATTERY COMPANY
111 West Monroe Street, Chicago
New York Kansas City San Francisco
In Canada: Niagara Falls and Winnipeg



LEADCLAD ROOFS

Piling Dollars on Your Roof?
Every time you have to repair a leaky barn or house roof you are piling extra dollars on its cost. Re-roof with LEADCLAD and you are actually done with that roof.

Leadclad roofing is high grade copper bearing steel coated with a jacket of genuine PURE LEAD. It is light, strong, fireproof, weather proof, lightning proof. And the heavy LEAD coating insures fullest protection through the years.

Your dealer will show you a sample of Leadclad. Study it, test it. You will then be sure that it is the kind of roofing to give you longest service at lowest cost. If your dealer doesn't have it, write us.

LEADCLAD
Manufactured Solely by
WHEELING METAL & MFG. CO.,
Wheeling, West Virginia

**Laying hens lay more
eggs when fed on Lay
or Bust, the famous
Park & Pollard
original dry mash.**

*Lay or Bust, the great
profit maker for poultrymen.*

Dependable Feeds for Every Purpose

Poultry Feeds: Lay or Bust Dry Mash • Red Ribbon Scratch • Growing Feed • Intermediate Chick Feed • P & P Chick Scratch • P & P Chick Starter—**Dairy Rations:** Overall 24% • Milk-Maid 24% • Bet-R-Milk 20% • Herd Health 16% • Milkade Calf Meal—**Other Feeds:** P & P Stock Feed • Bison Stock Feed • Go-Tu-It Pig and Hog Ration • Pigeon Feed • P & P Horse Feed • Pocahontas Table Corn Meal.



Penn State laying house on Wm. Horne's farm in Butler county.

Butler County Poultry Tour

LAST summer some seventy people of Butler county, Pa., took a sixty-mile tour through the county observing how different poultrymen are managing their business. Eight farm stops were made and at each place there was a definite factor of outstanding interest.

At Peter Sassino's farm, near Butler, they saw a 30x30-ft. straw loft house. This type of house is becoming popular in this state because of its cheaper construction per bird and has only half as much roof to keep in repair as do single story houses.

Donald Yingling, of Renfrew, was the host at the next stop. At this place 3,000 Tom Barron Leghorn layers are kept and 8,000 chicks were brooded last spring in individual colony houses. Gas brooder stoves were used.

Each Strain Separate

From this place the party motored to Elmview Farm, owned and managed by S. G. Lutz. Mr. Lutz has the Hollywood and Tancred strains of Leghorns. This is the largest trap-nest breeding farm in the county and one of the largest in this section of the state. Each strain is kept separate. The trap-nests are used to find the high producers and also to eliminate the occasional layers of small or tinted eggs. No bird is used for a breeder that has ever brooded, that is under size, or has a standard disqualification.

Mr. Lutz showed the party a hen which ten days ago completed her year from the time she laid her first egg. During that time she laid 297 eggs which weighed from 24 to 26 ounces per dozen. The bird is still in intense production and has laid 301 eggs during the last 365 days. There are 1,300 layers on this farm, all of which are being, or have been trap-nested.

A picnic lunch was the next thing on the program and Thomas Mack and Sons, at West Sunbury, were then visited. Mr. Mack has one of the oldest Tom Barron flocks in this part of the state. He frequently imports birds from England. On this farm 6,200 layers are kept and 17,000 chicks were started last spring. Part of the pullets were reared on range and some in confinement. The range pullets look smoother and larger, but the confinement pullets are equally as heavy and started to lay about three weeks earlier.

A Remodeled Barn

In some of the pens where there was pick-out trouble every pullet was painted with tar in the region of the fluff and that immediately ended the trouble.

The tour then led to A. M. Stoops, near Butler. Mr. Stoops remodeled part of a barn into a very satisfactory laying house. He also is a firm booster for the wire floor range shelter.

Most of the people were also interested in horticulture and a stop was made at Harry Hoffman's orchard, Mt. Chestnut. This orchard is 12

years old. The trees have a good set of healthy apples and are a picture of health and thrift. These trees were sprayed seven times this season.

The next thing of interest was a 40x40-ft. laying house at William Horne's farm, Mt. Chestnut. This house has been used one year and has been quite satisfactory. The litter became only slightly damp one time last winter.

The last stop was with J. N. Ritchie, at Prospect. This farm is noted for its poultry houses and equipment. One of the outstanding pieces of equipment is a large air-heating system for brooding chickens. Hot-air pipes run underneath the floor in a house 150 feet long. The hot air comes up under hovers and is automatically controlled. There are 22 hovers to this system. R. H. McDougall, County Agent.

Let 'Em Lay

I have 100 Leghorn pullets beginning to lay at four and one-half months. The eggs are very small, but pullets are looking fine. I would rather they would not lay yet. I'm feeding growing mash and scratch feed (commercial). How can I feed to overcome laying at this time? Would it be better to let them continue to lay and feed strong and moisten the mash at noon? Reader, Adams county, Pa.

It is considered better practice to allow pullets to lay when they come into production than to attempt to hold them back by removing the mash, feeding heavily on grain, etc. Such practices may interfere with natural functions so that the result is not so good.

Your laying pullets should be housed in a clean and comfortable poultry building, given free access to laying mash, and fed liberally on grain at night, with but a light feeding in the morning. If these pullets are in plump condition, a wet laying mash at noon will help to push production, but if they are not in good shape, a fattening mash of one pound each corn meal, condensed buttermilk and ground rolled oats will be better.

These birds should lay from now on during the season of peak prices, and will probably molt in the early winter, coming back to lay after the first of the year. If you can use artificial light, production will be increased.

In regard to egg size, the birds should soon start laying eggs of normal size, after the first few "pullet eggs" are laid. R. L. S.

Gizzard Capsule

The Geo. H. Lee Company of Omaha, Neb., announces that they have been granted a basic patent on their Gizzard Capsule for poultry. This patent broadly covers any capsule, tablet or pill for treating poultry, having a protective covering not affected by body heat and insoluble in all the fluids of the body but capable of being fractured by mechanical action in the gizzard.

THE HOOD 4-BUCKLE ARCTIC

**will keep your feet warm
and comfortable in the
coldest weather . . .**

WHEN the wind whistles and the snow piles mountain high—when the thermometer hits bottom and the thought of going outdoors gives you a

cold chill, get your feet into a pair of Hood 4-buckle Arctics and you'll be warm and comfortable all over.

And Hood Arctics will give you not only real foot comfort and protection, they will give you the best kind of service under the hardest wear. Uppers are of heavy wool cashmerette with a thick fleecy lining that goes way down to the toes. Extra heavy tire tread soles of grey or red rubber with wide extension soles for extra wear.

To make sure you're getting the genuine Hood Arctic look for the name Hood stamped on the sole. This is your guarantee of quality in rubber footwear.

Hood makes a complete line of arctics, boots and rubbers for every member of the family, for all work and dress occasions.



THE HOOD 4-BUCKLE ARCTIC is a first quality cloth-top arctic made particularly for protection against the coldest weather and deepest snow.

Send for the Hood
booklet on Farm Footwear
HOOD RUBBER COMPANY, Inc.
Watertown, Massachusetts



HOOD MAKES CANVAS SHOES • RUBBER FOOTWEAR • TIRES • RUBBER SOLES AND HEELS • RUBBER FLOOR TILING



BEFORE we discuss the actual operation of your tractor, let's take just a moment to consider winter storage—it'll soon be time for that. Place some extra time on your preparation this year and do a real job.

Follow carefully the directions in your instruction book about draining the crankcase oil and preparing the crankshaft and pistons for the winter with fresh oil. Make sure that all bearings and moving parts have a good protective film of grease or oil.

Go over the whole machine, greasing and oiling every part which might rust. Clean off the coating of dust and dirt that has collected during the summer.

The certainty that your tractor will start off in better condition next Spring and that extra years of life will be added to the machine, makes a good job of winter storing seem a worthwhile saving indeed.

Now for some savings next Spring

First—have you kept records of your fuel and oil costs this year? Are they accurate enough so you can check them against repair and service charges—and profits? We hope so, because that's the only way to be sure you are making the most money possible. And it helps gauge your methods for improvement next year.

We know quite a few farmers who are under the impression that they save money by purchasing oils that are just a little cheaper than the better grades.

But let's look at it in a little different way. You are draining the crankcase every 60 hours. Some manufacturers recommend from 30 to 60 hours. All right—if you are using an inferior oil and draining every 60 hours then, you are using an oil that has done its work and has lost its body. The result is nothing but danger—carbon, scored piston walls, wear and tear on bearings—repair bills and eventually, a short-lived tractor.

Still, on the other hand, if you drain this inferior oil at the end of thirty hours as should be done, you will be using twice



Drain the transmission regularly. Use Mobiloil "C" in the summer and Mobiloil "CW" during cold weather.

as much oil. So, either way, you are met with increased costs, in the way of repairs and shortened tractor life or excess use of oil.

Frankly, that is exactly the reason so many farmers are using Mobiloil today. Why? Because Mobiloil holds its rich lubricating character right up to and beyond the 60-hour draining period. And still more important, it cuts down repair and wear to a minimum. There will be less carbon and consequently, lowered carbon-removal expense—more power—and longer tractor life.



It will soon be time to store your tractor for the winter. Do a good job—it will help prolong the life of the machine.

How to operate your tractor at a lower cost

Here is just a sample of the kind of results Mobiloil is giving farmers all over the country. A Michigan farmer says: "I've been running this tractor for five years now and she has never had any repairs except valve grinding in all that time. I feel safe in saying that the reason for such remarkable service is that I have never used anything but Mobiloil."

Why Mobiloil makes possible these savings

In Mobiloil, ALL the essential properties of a full-duty oil are present and in correct proportion for your tractor engine.

These properties are: (1) **OILY CHARACTER**—provides moving parts with rich lubrication—and holds down wear; (2) **RESISTS HEAT**—lasts longer—keeps down oil consumption, and makes for economical use; (3) **CONTROLS CARBON**—keeps hard carbon deposits from piling up in your cylinders; (4) **OXIDATION CONTROL**—keeps oil systems from clogging, and valves from sticking and gumming.

Don't forget the transmission

The crankcase is not the only major point that needs careful attention. There's the transmission, too. And this is especially important to remember when you get ready for your Spring work.

If you should write today to the manufacturer of your tractor and ask about transmission lubrication, he would more than likely say something like this, "It is extremely important that the transmission get a fresh supply of high-quality oil at regular intervals. If you are using your tractor a great deal, the transmission should be drained twice during the season."

"Before fresh oil is put in, wash the case and gears with kerosene or a thin solution of oil and gasoline."

And when you refill, we urge you especially to make use of Mobiloil "C" in the summer and Mobiloil "CW" during cold weather. These oils hold their rich body right up to the time for the next draining. This means that gear teeth will be well protected from wear and tear. And the whole mechanism will operate smoothly and quietly—lightening the load on the engine—helping develop more power.

A new grease

One of the most important of your preparations for the Spring work has to do with pressure fittings and grease cups. Your Mobiloil dealer now has a new lubricant called Mobilgrease, for use with

pressure fittings. The main reason you'll like it is that it creeps to every friction point, sticks there and does a good job of lubricating. And unlike most greases, it does not wash out readily with rain.

For grease cups, we have a fine lubricant called "Mobillubricant." Try it.

You'll also want to use Mobilgrease and Mobilubricant on all your other implements where there are pressure fittings or grease cups. They are truly the most efficient greases we have ever seen.

Next time you are in town, have your dealer consult the complete Mobiloil Chart, just to check up on the proper grades of Mobiloil to fit your own particular needs—for tractor, truck and car. Also, have him tell you about the economy and convenience of getting Mobiloil in 55-gallon and 30-gallon drums.



Winter driving with car and truck

Just changing to any so-called "winter" oil for your car and truck is not enough. Many light-bodied oils give easy starting, but are too thin to stick to hot moving parts and protect them when your engine warms up.

Freezing weather demands double-range protection. Mobiloil Arctic is a specially made cold-weather oil for your crankcase. It flows freely at zero temperatures, and retains its rich lubricating body at operating temperatures.

For your transmission and differential use Mobiloil "CW." You'll be surprised at how easily the gears shift.

VACUUM OIL COMPANY
Makers of high-quality lubricants for all types of machinery



Mobiloil

Make this Chart your Guide

The correct grade of Gargyle Mobiloil for engine lubrication of prominent passenger cars, motor trucks, and tractors are specified below. If your car is not listed here, use the complete Chart at your dealer's. Follow winter recommendations when temperatures from 32°F. (Freezing) to 0°F. (Zero) prevail. Below zero use Gargyle Mobiloil Arctic.

NAMES OF PASSENGER CARS, MOTOR TRUCKS AND TRACTORS	1930		1929		1928		1927	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter

Autocars, 2 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 4 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 6 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 8 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 10 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 12 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 14 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 16 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 18 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 20 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 22 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 24 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 26 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 28 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 30 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 32 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 34 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 36 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 38 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 40 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 42 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 44 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 46 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 48 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 50 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 52 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 54 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 56 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 58 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 60 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 62 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 64 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 66 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 68 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 70 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 72 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 74 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 76 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 78 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 80 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 82 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 84 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 86 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 88 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 90 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 92 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 94 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 96 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 98 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 100 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic

MOTOR TRUCKS

Autocars, 2 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 4 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 6 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 8 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 10 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 12 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 14 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 16 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 18 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 20 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 22 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 24 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 26 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 28 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 30 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 32 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 34 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 36 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 38 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 40 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 42 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 44 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 46 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 48 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 50 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 52 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 54 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 56 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 58 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 60 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 62 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 64 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 66 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 68 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 70 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 72 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 74 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 76 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 78 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 80 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 82 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 84 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 86 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 88 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 90 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 92 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 94 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 96 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 98 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 100 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic

TRACTORS

Autocars, 2 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 4 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 6 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 8 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 10 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 12 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 14 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 16 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 18 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 20 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 22 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 24 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 26 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 28 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 30 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 32 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 34 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 36 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 38 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 40 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 42 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 44 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 46 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 48 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 50 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 52 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 54 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 56 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 58 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic
Autocars, 60 cyl.	BB	Arctic	BB	Arctic	BB	Arctic	BB	Arctic



Why — fiddle around?

WHY waste a lot of time and matches trying to find the one smoking-tobacco you can tie to for life? I can give you a passport to pipe-joy in two words: *Prince Albert!* I ought to know. I was already a pipe-smoking veteran when some of you fellows were still on the bottle.

Just get yourself a tidy red tin of P. A. and you won't need any ballyhoo from me. Throw back the hinged lid and let that P. A. aroma

broadcast its message. Then fill-up and light-up. Cool as the shock of a bill you'd forgotten. Sweet as the stamp reading "Paid in full."

Mellow and mild and refreshing, as no other tobacco ever was. That's P. A., whether you smoke it in a pipe or the makin's papers. Why fiddle around? Skip straight across lots to the one smoking-tobacco that sets the pace for all others. There must be a reason . . . there is!



Quality and quantity BOTH
—you get TWO / ounces
in every /

PRINCE ALBERT

—the national joy-smoke!

© 1930, R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

November 1, 1930

PENNSYLVANIA FARMER

(393) 19

Nest Box Notes

By R. L. SCHARRING-HAUSEN

EGG prices took a sharp rise about the middle of October, and any poultryman who was in a position to take in some money. At such a time early hatched pullets show their worth. I had a flock of early birds housed in August which has given good production ever since, getting up to 65 per cent, and laying nice large eggs. Even if these birds molt later, as they probably will, they have certainly been worth having during the time of high prices, and after they do molt, they should do well all spring and summer. It seems to me that it is very good business to have part of the pullets hatched out early enough to come into lay during the late summer.

THERE are two things which are very important in breeds which are kept for eggs. One of these is heavy production, and the other is the ability to lay large eggs. We hear a lot about high records, but not so much as we should about egg size. Recently there was a difference of 21c a dozen in the price of the first and second size on the New York market. I wonder how many of my readers realize that the ability to lay large eggs can be bred into a strain of birds, no matter what the breed, just as the tendency to lay large numbers of eggs, and that one is about as important as the other.

I AM afraid that production and egg size are too largely overlooked by the average poultryman, judging from personal contacts with chick and pullet buyers. Most of those I have come across seem more concerned with the size of the bird, even with Leghorns, than with her breeding in regard to production and egg size. It seems to me that if stock is ordinarily well grown, the size of the bird is of little importance except with the meat breeds.

A hen which will lay an extra dozen eggs during the year or an extra dozen first size eggs above a hen which weighs a pound more, has brought in more money than the difference in the value of the meat between the two; and yet time and again I have heard farmers say that So-and-So has "nice large birds" without ever giving a thought to the number and size of the eggs which they lay. I don't mean to say that I favor small birds in any egg breed, because I do not; but I do mean that in buying stock we should consider egg production and size ahead of the carcass value, because they mean more in dollars and cents.

BY this time all the pullets should be in their winter quarters, because they will do better there, even if not fully developed, than they will on range. When I house pullets, I always give the houses a very thorough cleaning, scraping and oiling before I put the birds in. That is very good insurance against disease. Merely cleaning off the dropping boards and throwing out the litter will not do, although it is very commonly done. Pullets are very susceptible to fall and winter ailments, and housing them in unclean quarters or putting them with old birds exposes them to roup and chickenpox unnecessarily.

Vaccination

Will you please give us some advice in regard to vaccination of poultry against chickenpox, roup and kindred diseases? We have read that the proper time to vaccinate is at about 16 weeks of age. As pullets are already laying I have been wondering if we might not do more harm than good by using the vaccine. How soon does it take effect? Could one wait until an epidemic started (providing it did this coming season) and check it by using at that time if necessary? Would you recommend using lights on pullets placed in laying house

(hatched March 17) to start production and check molt? W. H. Elmer, Harrison county, W. Va.

VACCINATION against chickenpox is generally successful and is now used in a number of states with good results. On a recent poultry tour through Pennsylvania, I talked to a number of very good poultrymen who vaccinated, and all of them considered it the thing to do where outbreaks of pox had occurred in previous years, while they also stated that they would not vaccinate if the flock had been clean the year before.

Since your pullets are laying, it is probable that treatment at this time would set them back, and as some authorities state that vaccination is beneficial at the beginning of an outbreak, in your case I would be inclined to wait for trouble before vaccinating. On my own farm, while I have had outbreaks in the past, I have never been troubled with pox or roup in old hens where there had been trouble in the pullet year, and have always felt that they had acquired an immunity during the outbreak in their pullet year. However, where trouble had not been present, there is no doubt that old birds would be susceptible to pox. As I have had no pox or roup on the place in several years, I have not treated my birds, but would not hesitate to vaccinate in case I had chickenpox in the flock.

In your case, I would get in touch with the Poultry Extension Department at Morgantown, and follow their advice, as methods of treating for chicken pox differ in various states.

I have always found the use of lights in the early fall on early hatched pullets to be a good way to ward off molting and increase production.

R. L. S.

Wheat in Poultry Ration

THE U. S. Department of Agriculture suggests the following rations, in which wheat is an important part, for poultry:

Laying Mixtures

Mash: Ground wheat 40 pounds, corn meal 20, meat scrap 20, ground oats 13, dried buttermilk 2, fine oyster shell 2, bone meal 2, common salt 1.

Scratch: Wheat 60 pounds, yellow corn 23.

For Growing Stock

Mash: Ground wheat 44 pounds, corn meal 20, meat scrap 15, bran 10, alfalfa meal 5, bone meal 3, fine oyster shell 2, salt 1.

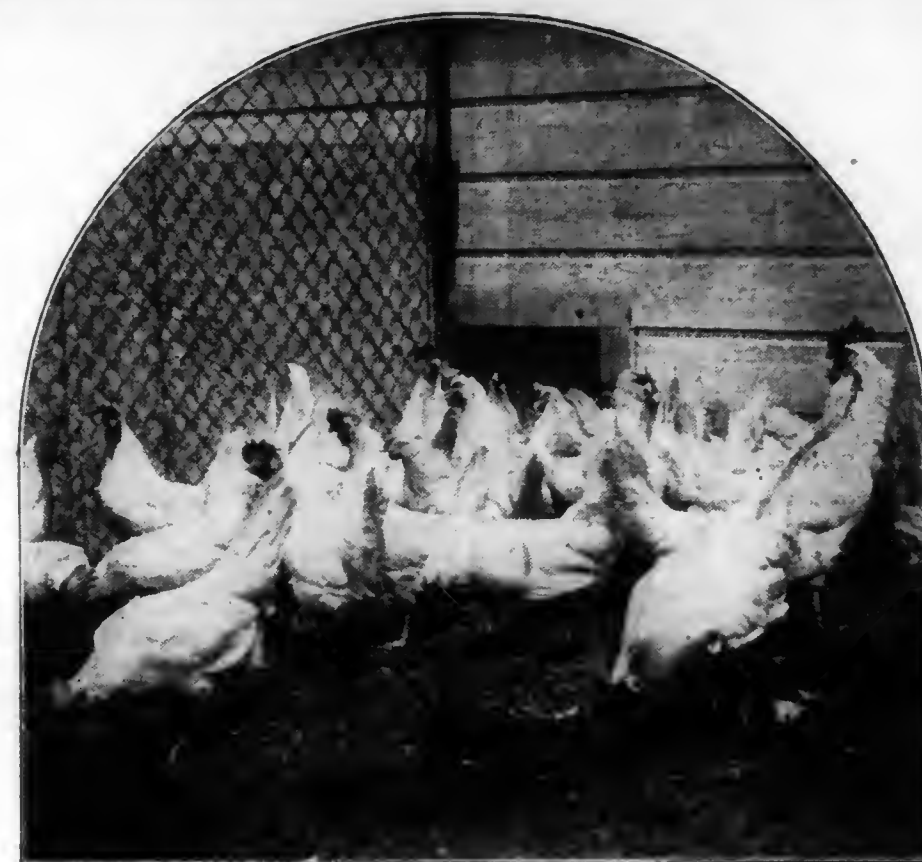
Scratch: Wheat 60 pounds, cracked corn 40.

Equipment for Poultry

PROPER equipment on the poultry plant will cut labor costs, reduce feed losses and aid in maintaining sanitary conditions, says J. C. Taylor of the New Jersey extension service.

The installation of an overhead carrier for feed and litter in laying houses of 100 feet or more in length will materially reduce the labor of feeding the birds and cleaning the laying houses. A portable crate with sliding doors on each end and a hinged door on top reduces the tiresome work of catching birds and lessens the possibilities of their injury. Automatic water fountains in the laying houses will provide a constant supply of fresh, clean water and eliminate a time-consuming chore.

The tremendous waste of feed on the poultry farm during the year should cause poultrymen to give careful thought to the problem of proper storing of feed and feeding equipment. Feed bins should be lined with tin to prevent losses caused by mice and rats. Use only hoppers of the type which do not allow a waste of feed. A reel is one of several devices that can be used to prevent birds from roosting on the hoppers.



Feed Now For Winter Egg Profits

*Start the Winter Season
With Your Birds Laying*

THIS is an important time for your laying flock. Late and backward pullets that do not start laying before cold weather cannot be expected to make a profit for you. Do your part now. Start feeding Ful-O-Pep Egg Mash at once. It contains a large amount of oatmeal that gives pullets stamina and vigor to quickly respond with a big yield of low-cost eggs. And better still, it keeps the birds in condition for all-winter laying—the season when egg prices are at their height.

Ful-O-Pep Egg Mash, besides oatmeal and other properly blended grain products, contains cod liver meal that builds hens' resistance to withstand common, winter, poultry troubles; contains molasses (in dry form) to aid digestion and act as a mild laxative; contains just the materials hens need to make eggs. It is most economical because of the results it accomplishes. Hens like it.

Ask your local Quaker dealer to tell you more about Ful-O-Pep feeds.

THE QUAKER OATS COMPANY, CHICAGO, U. S. A.

Quaker FUL-O-PEP EGG MASH

BUY QUAKER FEEDS IN STRIPED SACKS

FREE Let us send you our new booklet on winter egg production. Costs nothing. Just sign and mail this coupon.

Name

Address

Mail today to The Quaker Oats Co., Dept. 11-K, 141 W. Jackson St., Chicago, Ill.

All Voted for NICOTINE AND KAMALA



Worms Have No Chance

Read what state colleges say about poultry vermifuge. Two ingredients head the list everywhere. Nicotine for large round worms and Kamala for tape worms. Worms haven't a chance if a proper dose of these fresh ingredients is given to chickens or turkeys. That's where Pratt's help. We put these fresh, powerful drugs in airtight, insoluble coating that keeps them fresh. Easy to handle. Effective. Quick results. Get a supply at your dealer's or by mail.

Pratt's N-K (NICOTINE-KAMALA) TABLETS

Guaranteed "Satisfaction or your money back"

SEE YOUR DEALER IF HE CANNOT
SUPPLY YOU, ORDER BY MAIL.
Enclose money order or stamps, indicating the
size and quantity desired. We pay postage.
4lb. Birds and over Under 4 lbs.
500 \$1.00 50 \$1.65
1000 1.75 100 1.00
500 7.50 500 4.50
1000 12.00

PRATT FOOD CO., 124 Walnut Street
Dept. 149-A, Philadelphia, Pa.

Select Your Breeding Turkeys Now for 1931

The Moncalm Farm's strain of Mammoth
Bronze Turkeys are beautiful, black-bodied, car-
rinating, easy fattening, large, vigorous birds.
They have correct body markings and win at the
shows. They are also people lovers. We can dis-
patch unpaired high-class males and hens
from the Moncalm Farm's strain.

Write for description of prices
on Moncalm Farm's Turkeys to
your next year's breeding flock.

MONCALM FARM
R. F. D. No. 3, Box K,
PHOENIXVILLE,
Pennsylvania

KEEP FLOCK Healthy

Feed them Beef Scrap with Organic
Iodine from the Sea for better growth,
freedom from diseases and more eggs.
Write us today.

Consolidated By-Products Co.,
30th & Race Sts., Philadelphia, Pa.

PARKS BARRED ROCKS

BUY YOUR PULLETS, COCKERELS & COCKS NOW

Big, healthy, healthy, free range reared youngsters.
Many pullets ready to start laying. Cockerels and cocks
able to stand the ability to lay and pay in your flock.
"Parks" Strain is America's oldest and most
valued strain of Rocks—carefully selected
and bred for excellence and perfection since
1880. Winners of all the leading poultry
shows up to 325 eggs. Laid at 110 days.
Pullets ready to lay, averages up to 275
eggs. First prize and catalog
ask for prices and catalog
J. W. Parks & Son, Box 6, Altoona, Pa.

Write for prices and catalog

J. W. Parks & Son, Box 6, Altoona, Pa.

Navy Brand Concentrated Buttermilk

From Tuberculin Tested Cows

25 per cent milk solids, 6 per cent lactic acid, thick
and cream with no foreign ingredients. Reduces
lactation and increases butter yield. Reduces
disease resistance and promotes fertility and
health of birds. Good for chicks, broilers and laying
flocks. Sold direct from the factory in boxes of
450 lbs. Half barrels, about 200 lbs.

Write for prices and catalog
TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, PA.

BROILER—RAISERS

SHIPPING CRATES LOANED FREE

SHIP YOUR LIVE BROILERS and other fowls to
New York's oldest Live Poultry House. Get 100%
We are local commission merchants. Birds sold
returnable daily. Highest prices. Your birds are
unmatched. Inquire about us. Write for an action
guide, facts, shipping instructions. Broilers, Cockerels,
etc. Order to 2 KRAKAU POULTRY CO., Inc.,
West Washington Market, New York City.

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

more new bird
from the farm. Write for shipping guide.
Our 85 years experience and
ZENITH-GODDARD
171 Duane Street,

The Market Place

By W. R. WHITACHE

MANUFACTURERS have learned
and that the public craves beauty
and that it is no longer possible to
sell large quantities of goods on the
basis of price and quality alone. The
automobile industry was the first to
recognize this fact and the present-
day styles in cars are the result. This
application of beauty has even entered
such fields as kitchen equipment,
bath-room fixtures and house furnish-
ings.

Beauty has influenced window dis-
plays and advertising, as is shown by
the attractive stores, restaurants,
theaters and railroad stations. Show
windows and magazine advertise-
ments show the effort that is being
made to satisfy the consumer's desire
for beauty.

The farmer long ago recognized the
value of beauty to a degree. Many
farmers take a pride in their farms
and believe that a well-kept attrac-
tive farm is a good advertisement.
The products of the farm, however,
have not received as much attention.

Attention to Apples

Among the products which have re-
ceived some attention are apples. The
new tub basket, the ring face pack,
colored liners and shredded oiled
paper have been a step in this direc-
tion. Attractiveness does not mean
an addition of useless trimming. All
of these features serve a purpose, as
well as their help in making the fruit
more attractive.

Little has been done to beautify
the potato. In fact potatoes are han-
dled with forks and shovels in some

sections. The rough handling results
in bruises and a generally unattrac-
tive appearance. Those who are in-
clined to scoff at the idea of beautify-
ing the potato would do well to look
up the prices at which Idaho potatoes
have been selling in eastern markets,
as compared with those received by
Pennsylvania and Maine growers.
New sacks, uniform, clean, well-shap-
ed tubers make an attractive product
which brings a premium.

The sweet potato has received more
notice than the white potato, espe-
cially in New Jersey. Fancy packs
have been developed in the Swedes-
boro section that bring top prices in
all markets. It is true that the pota-
toes have quality, but they are made
more attractive by wrapping, clean-
ing and packing.

The Onion Steps Out

The onion came out of the old bur-
lap sack several years ago and now
appears clothed in an open mesh sack
that allows the buyer to see the entire
contents without opening the bag. In
addition to its convenience it is more
attractive than the burlap container.

Asparagus has shed the old cum-
bersome crate and now appears on the
market in the attractive labeled dozen
pyramid crate. It is more attractive,
the asparagus carries better and it is
more convenient to handle. Labels,
colored rims on baskets and crates are
all indications of what is taking place.
Nearby growers are behind their com-
petitors in the more distant states in
this matter of making their products
attractive.

To Keep Apples for Winter

I have some very nice apples which
I would like to put away for the
winter.

We were told to put them down in
sawdust and they would keep well all
winter. I got orange boxes and thought
we could pack them in there.
Erie county, Pa. Mrs. S. J. B.

APPLES packed in sawdust should
keep well, provided the sawdust is
not wet. The air spaces between the
sawdust grains serve to partially
insulate the fruit against the fluctu-
ating temperature of the cellar; the
temperature about the fruit re-
mains more constant, which is favor-
able to long keeping. If, in addition,
the cellar temperature is reasonably
cool, say between 40 and 55 degrees,
and the air not too dry, the apples
should keep well. The less the fruit
is handled in storage the better.

Other kinds of insulating material
may be used in storing small quan-
tities of fruit. The best is granulated
cork, but it is expensive. This is the
material in which fresh California
grapes sometimes are shipped to east-
ern markets. Soil also is good in-
sulating material, especially if it is a
sandy loam, not a heavy tight clay.
In the absence of a good cellar, apples
may be stored out of doors very suc-
cessfully in the following manner:

Dig a trench about six inches deep
and three feet wide, line it with straw,
pile the apples upon the straw in a
cone-shaped windrow, cover them a
few inches deep with straw, then bank
soil over the whole pile from one to
two feet deep, according to the sever-
ity of the climate. Large piles may
have ventilators left every four to
six feet; these may be of wood, or
even of bundles of straw that reach
down into the pile of apples. I have
known apples to keep perfectly in
this way. It is an inconvenience, of
course, to get the apples out of such
piles, especially in the winter.

A better method, when only a few
bushels are to be kept, is to sink a
barrel into the ground, to its side,
and cover it with straw and soil, leav-
ing the end open and protected by a
board cover, large and small. This is

more convenient than burying the
apples in the ground. All kinds of
root crops may be kept in this "bar-
rel" system.
S. W. Fletcher.

Farm Outlook Material

(Continued from page 5.)
that are undersized, weak, or off color
in any way should be disposed of.

The pullets then should be fed a
good ration, both mash and scratch
grains. Feed and water should be at-
tended to regularly, as poultry re-
spond to regularity as well as any
other class of livestock.

The chicks should be hatched early
so that they will come into egg pro-
duction shortly after having been put
into the laying house. This insures
good production during the period of
highest prices of eggs.

Culling should be practiced at regu-
lar intervals of about two weeks
from April until October. This re-
moves the non-laying hen very soon
after she stops laying, thereby pre-
venting her eating the price of several
dozens of eggs in feed when she
is giving back nothing in return. By
following these and other good man-
agement practices, the number of
eggs per hen will be increased and
the cost per hen and per dozen of
eggs will be reduced. If, then, the
price of eggs and poultry is low the
farmer will be able to pass through
the period without losing any money,
even though he may not make very
much, but also will be in a position
when the prospects brighten to con-
tinue producing at a lower cost and
make more net income.

I am not meaning from all the
above discussion to point out that
farmers should practice good man-
agement only in times of poor out-
look reports, but to use good man-
agement practices at all times. When
the outlook is not bright he should be
more careful of the little details that
help to reduce costs, and when the
margin between cost and price widens
he will be in a position to reap the
benefit.

The Poultry ITEM

Start this month and get all
7 Secrets of greater poultry
profits. Learn how to have
more eggs when eggs are high-
est. Enjoy Wyckoff's "to the
point" articles—sound to the
core—because he first proves
out every suggestion he
makes. Find out how to save
on feeds. Find out how to
get better prices.

7 months' trial with the 7 free
profit secrets—only 10c. Fill
in and mail coupon now—
your subscription will start
at once! Send today!

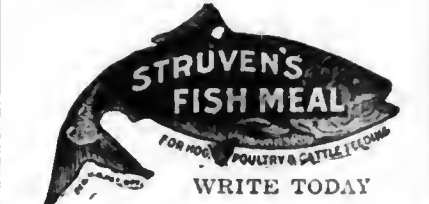
The Poultry Item,
Sellersville, 701, Pa.

Enclosed is 10c. Send me Poultry Item
with the seven "Secrets" articles.

Name

Address

TEACHER: "Johnny, define 'EF-
FISH-ENCY.'"
JOHNNY FARMER: "EF-FISH-
ENCY? Why that's the effect
STRUVEN'S FISH MEAL has on
Hog, Poultry, and Cattle Feeds.
Makes 'em give more profit, bet-
ter stock, lower final feeding cost."
TEACHER: "Right, Johnny! Be
sure you always ask for it by
name, and get your money's
worth."



WRITE TODAY
Samples and Booklet: "Care and
Feeding of Poultry, Hogs, and
Cattle" free.

CHAS. M. STRUVEN & CO.
114-116-H. S. Frederick Street
Baltimore, Md.

"Peerless" Fodder Shredder

If you have 3 H. P.
engine you can run
this 14-inch ma-
chine successfully.
Will pay for itself
in one year's use.
Will not pulverize
blades and tops.

Write for price and catalog
A. M. Dellinger, 723 N. Prince St., Lancaster, Pa.

ULSH'S Superior Chicks

White Wyandottes, White Rocks and Barred
Rocks. Write for Fall & Winter prices.
Hatches weekly this year round. Best
delivery guaranteed. Postage paid
JAS. E. ULSH, Box P, Beaver Springs, Pa.

QUALITY CHICKS

Barred, White, and Golden
Heavy Mixed. Superior
Affordable. Hatches weekly. In 10
days old chicks. In 10 days
laid and ready to lay.
J. A. Baumgardner, Beaver Springs, Pa.

ADVERTISEMENTS

are short-cuts to finding out
truths. The truths about every-
thing you want to buy. The names
in advertisements are names of
solid reputation. The labels in
advertisements are symbols of
satisfaction. It pays to read the
advertisements, for then you
know what is good. The prod-
ucts they tell you about are be-
ing bought, tested, and used.
The fact that they're still being
advertised is alone proof of their
worth.

What "Pinchotism" Means

When Gifford Pinchot became Governor he found the State burdened with an appropriation liability of nearly \$32,000,000 with only \$31,000 in the General Fund to meet it. At the end of his Administration he left a balance in the State Treasury of over \$20,000,000 - - millions above all liabilities.

During Pinchot's Administration:—

85% of the State's income went back to the people in good roads and appropriations for their schools, hospitals, etc.

Enactment of the Administrative Code completely reorganized the State Government and assembled more than 100 independent spending agencies under 18 departments and 3 independent Commissions.

The Budget was established, paving the way for adequate financial control.

2372 miles of good road were constructed, and nearly \$200,000,000 was expended upon State road work without a breath of scandal.

The Department of Public Instruction handled more than a hundred and twenty-five million dollars on the pay-as-you-go plan, at 5% less cost of administration than during the pre-

ceding 4 years, while the State's contributions to teachers' salaries in the poorer districts were increased 50% to 75%.

Nearly \$800,000,000 of questionable or fraudulent securities were shut out of Pennsylvania.

More progress was made toward the purification of streams than in the entire previous history of the State, and agreements were entered into with New York, New Jersey, Ohio, West Virginia and Kentucky to prevent stream pollution.

Many of our best laws were enacted in protection of our dairymen, our farmers and the food supply of our people, and in safeguarding the workers in our industries. Likewise, broadening amendments were made to our Workmen's Compensation and other labor legislation.

Those are but examples. A Governor who thus devotes himself to the interests of the entire State and its people, is cordially hated by those few large corporations which gouge the public with extortionate rates, or have looked to professionalized politics for special privileges. These are the interests now picturing Mr. Pinchot as an enemy of all business and a menace to investments, because he promises to correct such dishonesties.

Mr. Pinchot's four years in office, his accomplishments in spite of financial handicap, and his plain statements in this campaign, refute that libel. In the Primary the Republican voters of Pennsylvania nominated him as their candidate for Governor. The staunch Republicanism of this State, as well as the best interests of the Commonwealth and its citizens, demand that you elect him and all the other Republican nominees.

To do so---

Vote the Straight Republican Ticket

For U. S. Senator
James J. Davis

For Governor, Gifford Pinchot
For Lt. Governor, Edward C. Shannon

For Secretary of Internal Affairs
Philip H. Dewey

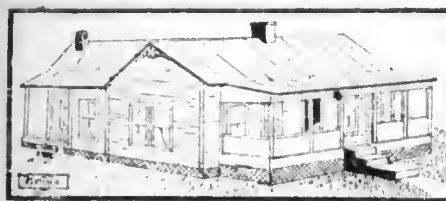
For Supreme Court
Judge George W. Maxey

For Superior Court
Judge William B. Linn
Judge James B. Drew

Republican State Committee of Pennsylvania

(Advertisement)

"HOME-SWEET HOME"



The Owl Gets Married

An Indian Legend Retold

A WOMAN of the Cherokee tribe had a beautiful daughter. Tall she was, straight as an arrow, light of foot, and merry of eye. Many young braves came wooing. They brought gifts of wild fruit, corn, or even wild flowers for her hair.

But her mother had trained her carefully.

"Marry no one but a great hunter, my child," said she. "Then there will always be meat in the lodge."

So one by one the young men left with drooping heads.

The owl, hearing tales of her beauty, assumed the shape of a handsome young man and went to pay his respects. He was so smitten that he immediately proposed marriage.

"I shall marry only a great hunter," the maiden assured him.

"Then I am the happiest of men," replied the Owl, "for in hunting I excel."

Very well satisfied the mother made them a wedding and the next day the bridegroom was sent out to hunt.

He returned at evening with nothing but a small, worthless piece of meat that the heavily laden hunters had cast aside.

His wife and her mother were much astonished and began to question him.

He made up a great tale about the misfortunes of the day. But he said that tomorrow he would go fishing and they would see the fine string he would bring home.

Next evening he arrived with nothing but a minnow.

The mother advised her daughter to quietly follow him the third day.

She slipped down the path after him, noiseless as a shadow. As they reached the water, she almost fainted as she saw her husband change into a great owl and fly up into a tree. He was sitting watching the hawks and eagles in the hope that they might drop a fish for him to take home.

In the evening when he went home he told his wife that an owl had driven his game away.

"You are the owl," exclaimed the disappointed girl. "Leave my house forever," and she drove him out of the village.

The owl flew away to his tree and moped and moped until he became the melancholy bird we know to this day.

Florence C. Hebel.

Our Poets Tell of Fall

THE following prize poems were submitted in our recent contest:

The leaves are turning red and gold
And some are falling down,
It seems to me they're playing tag,
And jumping all around.

A little leaf just told me
Why they are so gay.
They're going to give a party,
When do you think? Today!

The squirrels are all invited,
And all the pumpkins too,
And maybe if you ask them,
You can be invited too.

Margaret Rothenberger.

Diggin' up potatoes,
Storin' them away,
Cuttin' huskin' yellow corn
To fatten all the pork,
Carryin' crook-neck pumpkins in
Just before the cold, black frost
That's Fall, the best part
Of the whole year round.

Carvin' funny faces on
A pumpkin, round and hollow,
Shinin' big, red apples
To eat at recess time,
Studyin', learnin' pieces, too
For Halloween at school,
That's Fall, the best part
Of the whole year round.

Helpin' with the many tasks
At the old country home.

The Young People

Historical Contest

TWO additional lists will appear after this one before the proper time to send them back to this office. Each week clip the coupon, answer the questions and put them away carefully until the final list appears.

Then—write a short article on "Why I'm Glad to be an American." There will be six splendid prizes—three for boys and three for girls. They are out of the ordinary and certainly will be worth working for. Here they are:

First prize for boys.—Football of cowhide split, fully lined, complete with valve key, lacing needle and pump.

First prize for girls.—String of pearl beads.

Second prize for boys.—Cowhide split football without pump.

Second prize for girls.—Pin set with brilliants.

Third prizes for both boys and girls.—Books.

List No. 2

1. Who was the first woman elected to the Congress of the United States?
2. Where in this country did women first vote?
3. How many women have been governors of state?
4. Name them.
5. When did the woman suffrage amendment become a part of the United States Constitution?
6. To what country did Alaska formerly belong?
7. What did the United States pay for it?
8. Give the date of the purchase.
9. When was the first actual airplane flight made?
10. Where was it made and by whom?

Keep this list until the final list appears.

Smilin', learnin' more each day,
At our country school,
Playin', earnin', always tryin',
To do my very best
In Fall and all the time
Of the whole year through.
Pennsylvania. George Steele.

October's breath upon the hills;
October in the wood;
October where the orchard trees
Bend with their weight of good.

October bending down to say
Grace into Autumn's God;
October lightly treading now
The brown and patient sod.

October's friends to greet him aye
With gladness, like myself;
October winds to bid us place
Our books upon the shelf.

October's carols, like his gold,
Across the cornfields blown;
October, which of all the months
I cherish as my own.
New Jersey. Charlotte Davis.

Leaves are turning gold and crimson,
And the air is frostily sharp.
Farmers are gathering in their harvest,
Working away 'till almost dark.

The first cheerful fire is blazing
So merrily on the hearth.
We draw our comfy chairs up closer
And laugh happily in our mirth.

Fall is here, the glorious season,
When the year is in its prime.
We are happy, brisk and merry
In the crisp, cool autumn time.
West Virginia. Vivian Staats.

Glorious Fall is here again
Bringing joyful weather,
Turning leaves to brilliant hues,
That blend so well together.

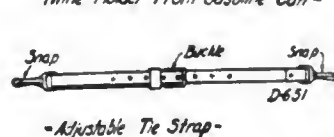
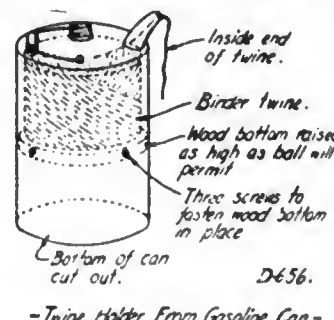
And then Fall brings the harvest time,
And also football season;
Why shouldn't I like grand old Fall?
Can you give me a reason?

In Summer, Spring and Winter,
I'm not satisfied at all;
But, oh, I get so happy,
When Summer turns to Fall.
Pennsylvania. Gerald Fisher.



Twine Holder from Oil Can

HERE is a handy twine holder any boy can make. Take a discarded gasoline or kerosene can as nearly the size of the ball as possible, cut out the bottom, make a wooden bottom which just fits inside the can, place ball of twine inside of can with end of twine through spout, and then fasten wood bottom as high



in can as possible, as shown in the diagram.

This is mouse and water proof, never gets tangled even if rolled around, and is easy to hang up or set wherever convenient. By fastening the bottom in place with three small screws, it requires only a few minutes to put in a fresh ball.

I. W. D.

OUR ARTISTS' HOMES

THE pictures at the top of the page are views of the homes where two of our readers live. The one showing the house, barn and silo was drawn by Grace Henry of Pennsylvania, while the other is the home of Broadus Butcher whose name you have seen quite often on "Our" page.

Little Folks' Corner

We Tell About Our Pets

The Story of Hoppi

MY pet is a toad which I call Hoppi. One day when in the cellar I saw a nice big fat toad. I talked to him, then went away and every time I went in the cellar I would look for him and call "Hoppi." Soon he learned to know I would not hurt him. Now he comes at my call. I often see him catch flies. He sits very still until the fly or bug gets close, then he opens his mouth wide and they just seem to be drawn into it. We are afraid our cat will catch him some day for she looks longingly at him. We would her but some day we may not be there to save Hoppi. Paul S. Falter.

Chippy's Happy Days

Chippy was a little pet squirrel which a woman gave to me for a pet. I put him in a wire cage but this was not like the freedom of the forest and woods. I fed him nuts and berries and he would sit on my lap for hours. But one day the cage door was left open; he ventured out through the hall, into the garden and then a cat pounced on him and that was the end of poor Chippy. So I had him stuffed and he is holding a nut in his little paws that he can never crack. Israel S. Kengost.

"Bum"

One day in July I saw a small kitten behind our barn. He was among the chicken houses. We thought he caught the chickens but he didn't. He was in a field of wheat and seemed very wild. I tried to catch him but couldn't. I waited till wheat for him to come close to me. Finally I saw him coming and he didn't see me. When I caught hold of his tail he said "Mee-ow" but I didn't let go. I brought him to the house and gave him some milk. Soon he got very tame and now is a great pet. He will put his paws around my neck as though he really liked me. We call him "Bum" because he came like a bum begging for something to eat. Mary Ellen Shetler.

My Cow "Nancy"

Among my father's herd of cattle there is one cow that we call "Nancy." She is a yellow and white cow, but is so small

any one would almost take her for a yearling.

When I come into the yard at night she will come towards me and put her nose under my arm. She does it because she either wants petting or something to eat. I feed her outside and when I bring her box of food to her she will come running behind me and almost knock the box from my arms. She will follow me if she is not too busy and I think a lot of her. If you young readers have as nice a pet I know you will be happy. Charlotte Snyder.

My Pet Cat and Dog

One day as I was coming home from school a kitten came up the road saying "Meow." I picked it up. A man came down the road who lived nearby. I asked, "Is this your cat?" He said, "No, but you can have it." So I brought it home.

A few weeks later I got a little dog which we named "Fannie." We had not named our kitten yet so my mother called him "Tibby," which we have always called him. The two played and romped about the room. Tibby would run and jump on a chair and Fannie would get below the chair and could not get Tibby. When Tibby got a chance he would reach down and claw Fannie on the head then she would get cross and would growl at Tibby till he would get down and run.

Since they have got bigger they do not play much. In the mornings after my brother and sister leave Fannie comes up to my room and my other sister's room and wakens us, then she will go down the stairs again. William Foster.

PRIZE WINNERS

Poems on Lanes

Mildred Ruth Beltz, Anita Harner, Margaret Mainhart, Helen Lorraine Chess, Raymond States, Eleanor Demack, Bernadine Hamilton, Harold Butcher.

Letters on Our Pets

The books have gone to these four: Helen Smoker, Isabel Barrett, William Foster, Emogene Joy.

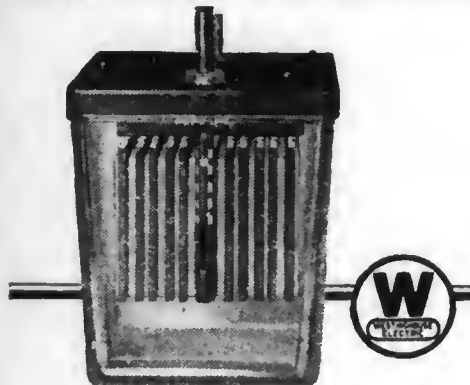
Prize boxes have been sent to these boys and girls who also sent in such interesting stories: Paul S. Falter, Emma King, Mary Ellen Shetler, Alice Egan, Charlotte Snyder, Anna Mae Smith, Myrna Bell, Annabel G. Wegley.

PASSING EVENTS IN PICTURES



(Copyright by Underwood & Underwood.)

HERE'S THE ANSWER to your BATTERY PROBLEMS



The Westinghouse Planté Battery—is a 10-year solution to dim light annoyances. The Planté positive plates are stamped from sheet lead almost 3/4-inch thick, then grooved in an unusual way to give long life. Westinghouse guarantees every Planté Battery for 10 years, no matter what type or size of Electric Service Plant is used with it. All you need do is to follow the instructions for its application and care.

You can't afford to be without this 10-year Westinghouse Planté Battery. Learn about its reasonable cost and the convenient payment plan Westinghouse has prepared for you. Get the facts about Westinghouse Electric Service Plants and Water Systems, too. Mail the coupon today!

The complete farm electrification people

Westinghouse

Westinghouse Electric & Mfg. Company,
Small Electric Plant Section,
East Pittsburgh, Pa.

Please send me, without obligation, full information and prices on () Planté Batteries () Electric Service Plants () Water Systems.

Name.....

Town..... R. F. D. No.....

County..... State..... P. H. 130

DELLINGER

Hammer Type

MILLS

Priced as Low as \$110.00

F.O.B. Lancaster, Pa.



In Sizes
to
Operate with
7 1/2 to
40 H. P.

Furnished with or without
Automatic Feed Rolls and
Governor.

Write for catalogue.

A. M. DELLINGER, Lancaster, Pa.

Free BOOK ON CARE OF YOUR DOG

A valuable, illustrated 101 page treatise—based upon over 50 years' experience in the treatment and feeding of dogs. There is a special Glover Medicine for most conditions. Sold by dealers everywhere. Should they not have the particular Medicine you need—obtain it at once by writing direct to us. For free book write:

GLOVER'S

Imperial
DOG MEDICINES

119 Fifth Avenue, New York, N. Y.

PLEASE mention Pennsylvania Farmer when writing to our advertisers. They want to know and we want them to know that you read it all.

What Our Readers Say

The School Question

IN the August 16th issue my good friend W. D. Zinn discusses the school question again. Mr. Zinn and I disagreed on this question a few years ago, and we may not agree again, but I would like to express my views.

I think the time has come for economy in schools. I favor a county unit of taxation. By that I mean the tax levy and school term should be the same all over the county. In Marshall county the tax levy runs from \$1.66 to \$2.88 in various districts. Some districts have nine months schools, others eight and some may not have over six this coming term. Is this fair to the boys and girls and to the taxpayer?

Some districts have made a cut in teachers' salaries, others haven't. Is this fair? Cut the salaries if necessary, but there should be a uniform salary system in the county.

I am opposed to an independent school district for this reason: If a family moves into an independent school district they must buy a whole new set of text-books. Usually in moving from an independent school district into another district the same thing is true. Is this right?

There is too much politics and not enough teaching in our schools today. These may be unpopular statements to make at this crucial period but I believe in living and let live. In order for the farmer to pay his taxes there must be a reduction in taxes. The same is true of every one else. School boards must economize first and continue to do so until a period of prosperity reaches us again.

C. B. Allman.

Marshall county, W. Va.

Part-Time Farming

AMAN of about sixty makes summer farming profitable from several standpoints. His farm was rapidly running down as to buildings and fertility while he was idle and lonely in town following the death of his wife, so he put the eighty acres in pasture, two fields of about equal dimensions, and reserved the land around the buildings for himself. In summer he raises chickens and has one cow which he uses to raise four fine calves, as he needs little milk for his own use. His noon meals he gets with a neighbor's family and the rest he does for himself. He is healthy, more contented and the place is looking better. He actually makes more money from his pasture and his own summer projects with calves and chickens and eggs and garden stuff than he did with tenants.

This may be the solution for other discontented town dwellers. In winter this man goes back to town, selling off his chickens, putting his cow out with a neighbor and closing the farm house. The insurance holds because the place is occupied a good part of the year, and the old fertility is coming back. His boundary fences and one cross fence are all that must be kept up and as he pastures only sheep and young stock there is little wear and tear on the fences. But more than all he is not idle and discontented as so many retired farmers are in town.

H. R.

Observations on T. B. Tests

THERE are many good people in our good state of Pennsylvania—and elsewhere—who do not believe in the tuberculin test in dairy herds. I do not believe that any of these doubters are to be found among those herd owners who have had their animals tested and compared "before and after" results.

It may be illuminating to make a brief analysis of our recent area test

here in six townships in Lancaster county.

Four years ago modified area tests were made in Lancaster and Colerain townships. Sixty per cent of the animals reacted, were condemned and slaughtered. The other day we finished area tests in four more townships, and included also the townships above mentioned, with the result that in a cow population of 439 in Lancaster township there were eight reactors; and in Colerain township, with 2,184 animals tested, there were but 11 reactors, one-half of one per cent, against 60 per cent in the initial test four years ago, in these two townships.

It is not my intention to comment further on these facts and figures, but I merely submit them for the thoughtful consideration of those who are "agin' the test." W. A. McSparran.

Memories of a Hoss- Trader

(Continued from page 8.)

We started. The night grew very dark and we were far from home. The critter balked for us at a grocery store where they had been going to market and immediately in front of the hotel where we had traded the bay beauty to the landlord mentioned in a previous paragraph. We left the lady sorrel at the grocery and went over to see our friend the landlord. We began broadcasting—this is a more common word now—wild oats and kept on until we reached home all right side up and with a good piece of trading stock.

On one other occasion a pitprop maker came in from the ridge riding about seven-eighths of an iron gray pony. This pony had the points of his ears trimmed off square, his tail off square, his mane cut close and carried distinct harness marks. To drink he would put his head into the water up to his cheek bones and the feed was always left in the corners of his trough. We later discovered he had no tongue, which had likely been twitched off in a blacksmith shop, a place he hated and a blacksmith hated to see him coming.

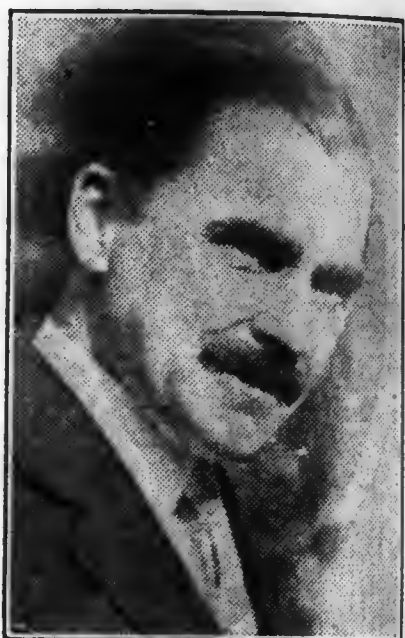
A Difference in Value

We bought him for \$7.50, saddle and bridle. He looked like a worker with his distinct harness marks, but they had been put on with a clipping machine. Yes, we hitched him, tied him down with a kicking strap and were off. We started down grade on a worm curve and the first bank we came to he balked and started backward, making good speed. We got out of that old buggy quicker than you can imagine. We did all we knew but give him sugar to gain his confidence.

In the mixup Shorty sprained his ankle, one wheel was kicked to pieces and all in all we had a mess. I had the pony and Shorty to get back to town and the only way in sight was to help him on the back of the pony. I led the pony with Shorty on his back. As we came into town we made no presentable appearance, of course, and as we passed an old soldier sitting on a bench he said he thought the battle of Bull Run had been fought nearly forty years before.

In conclusion I want to say that in all my trading I never told a man a lie. If I traded with a man and gave him a dangerous horse I warned him. In trading we must never begin to enumerate the blemishes we see on the other fellow's horse, or the habits displayed in the white of his eye. The owner knows, or ought to know, his own horse. It is but a matter of the difference in value of the animals. If you are a good sport ask questions and answer them after the trade is made.

HOW WE ALL KNOW JOHN M. HEMPHILL



The Liberal Party Candidate For Governor

BY force of sheer merit and ability, of straightforwardness and simplicity, John M. Hemphill is capturing multitudes of open-minded men and women. On the platform, over the radio, in all unbiased newspapers, he has come to be known to millions of Pennsylvanians as a genial, warm-hearted human being, as well as a candidate who is independent, liberal, able, fearless.

From life-long residence and a heritage of hundreds of years, John M. Hemphill KNOWS Pennsylvania—the spirit, tradition, problems, and needs of the Keystone State. Years at the bar have brought him a knowledge of government and constitutional law that fit him to grapple with those problems. Under the fiery test of war he has proved his stout heart.

In notifying Republican State Chairman Martin only last Saturday, October 25th, that he would not support Gifford Pinchot, Asa B. Martin, for fourteen consecutive years Republican County Chairman of Pike, Pinchot's home county, said:

"Some years ago Mr. Gifford Pinchot, for reasons best known to himself, became technically a resident here in Pike County. We know him well. Others may have forgotten his past record. We have not. He has no interest in his neighbors except when ever he decides to run for office.

"As between two men, neither of whom is a Republican, I prefer Mr. Hemphill. The latter is at least above board in his politics. He is a distinguished lawyer. He belongs to that fine new generation of Americans who have come forward to assume public burdens. He is sound and sensible. He is a Pennsylvanian whose family and forefathers have lived and worked in Chester County for more than two hundred years. Like his forefathers, he earns his living and thereby supports his wife and children.

"Like Roosevelt he proved, beyond peradventure of a doubt, his unselfish devotion and patriotism to his state and nation by volunteer service as a combat soldier in the forefront of some of the most deadly battles of our country's history.

"I do not believe that such a man is now or ever will be the tool of Philadelphia politicians nor of any other single element of our commonwealth to the detriment of other elements. I shall vote for Mr. Hemphill."

The Liberal Party of Pennsylvania knows of no better way to make John M. Hemphill, its candidate, known to the farmers of this state than this.

LIBERAL PARTY OF
PENNSYLVANIA
Charles Dorrance, Chairman
(Advertisement)

REPUBLICANS!

TO VOTE FOR

HEMPHILL

for GOVERNOR

Mark your
ballot like this

FIRST COLUMN	United States Senator (MARK 1)	Judge of the Supreme Court (MARK 2)
REPUBLICAN <input checked="" type="checkbox"/>	James J. Davis.....Republican Sedgwick Kleider.....Democrat Ransom P. Cook.....Communist R. W. Moore.....Prohibition William J. Van Hook.....Socialist	George W. Massey.....Republican Henry C. Miller.....Democrat Charlotte P. Jones.....Communist Charles Palmer.....Prohibition John W. Clayton.....Socialist
DEMOCRATIC <input type="checkbox"/>	Gifford Pinchot.....Republican John M. Hemphill.....Prohibition John M. Hemphill.....Liberal	James B. Drew.....Republican Aaron E. Reiber.....Democrat George P. Douglas.....Democrat Peter Mueller.....Communist Max Silver.....Communist Ida G. Kast.....Prohibition
COMMUNIST <input type="checkbox"/>	Frank Moore.....Communist James H. Maurer.....Socialist	William B. Linn.....Republican James B. Drew.....Republican Aaron E. Reiber.....Democrat George P. Douglas.....Democrat Peter Mueller.....Communist Max Silver.....Communist Ida G. Kast.....Prohibition
LIBERAL <input type="checkbox"/>	John M. Hemphill.....Liberal	Judge of the Superior Court (MARK 3)
	Edward C. Shannon.....Republican Ouy E. Bard.....Democrat Samuel Lee.....Communist Mabel D. Pennock.....Prohibition Mary Winsor.....Socialist	Representative in Congress (MARK 4)

REPUBLICANS, you will not lose your party status by voting for Hemphill for Governor. Under the law you can mark your ballot in the Republican Party column and also vote for Mr. Hemphill for Governor, thus voting for all Republican candidates except Mr. Pinchot.

Here is the law:

"If he desires to vote for every candidate of a political party, he may make a cross-mark in the appropriate square, opposite the name of the party of his choice, in the straight party column on the left of the ballot, and every such cross-mark shall be equivalent to a vote for every candidate for the party so marked:

"Provided: That the voter may make a cross-mark in the appropriate square, opposite the name of the party of his choice, in the straight party column on the left of ballot, and may also make a cross-mark in the square to the right of any individual candidate whom he favors. In such cases his vote shall be counted for all the candidates of the party in whose straight party column on the left of the ballots he placed such cross-mark, except for those offices for which he has indicated his choice by marking in the square to the right of individual candidates, and his vote shall be counted for such individual candidates which he has thus particularly marked, notwithstanding the fact that he made a mark in the straight party column on the left of the ballot."

ACT 1919, S.I.C. 1, P. L. 829

THE EYES OF THE NATION ARE ON PENNSYLVANIA

Next Tuesday the citizenry of Pennsylvania will go to the polls to elect State and National officers. For Governor of this commonwealth there are two candidates, neither of whom is a Republican.

On the one side is Gifford Pinchot, not an active Republican, whose record shows him to be an enemy of the Republican party; whose campaign utterances show him to be a menace to business and employment, an economic demagogue and a prodigious promiser.

On the other side is John M. Hemphill whose forefathers lived in this state for 225 years; a lawyer of high attainments, with unquestioned attributes of able statesmanship; whose valor on the fields of France awakened the admiration of the whole American Army.

Do you want the unsafe doctrines of Pinchot at a critical time for all wage earners or the safe, sound doctrines of a man whom all Republicans can support with pride in duty well done.

JOHN M. HEMPHILL

John M. Hemphill left a thriving practice to join Company K, 47th Pennsylvania Infantry. Fourth Regular Division. He was made a Captain in action in France where he made an enviable reputation.

ELECTION DAY.. Tuesday, November 4th .. Be Sure to Vote!

LIBERAL PARTY of PENNSYLVANIA, CHARLES DORRANCE, Chairman

(Advertisement)

Farm and Dairy

By L. W. LIGHTY

Make MORE PROFIT from your COWS

A ration with Dried Molasses Beet Pulp in it is as beneficial as a day on Spring Pastures. It increases milk production and adds to your daily profits. Dried Molasses Beet Pulp is the great vegetable milk producing feed—all the sugar beet after extraction of the sugar—then dried and packed in sacks for convenient handling—you get the nourishing, health building part that tones up the cow's system.

Feed Dried Molasses Beet Pulp
Cut down on some of the heavy heating grains in your ration and substitute Dried Molasses Beet Pulp. It is cooling, palatable, laxative. It prevents the bad effects of heavy feeding as it lightens the ration, aids digestion—no feed is wasted.

Widely Used
Most dairymen know the matchless value of Dried Molasses Beet Pulp. It is widely used—now it is available at low prices. But remember the demand by dairymen who know its value is large so see your dealer and order early to avoid disappointment or delay. Write for free booklet "Profitable Feeding".
THE LARROWE MILLING CO.
Dept. P. F. 3
DETROIT - MICHIGAN

When writing advertisers please mention Pennsylvania Farmer.



Production is Increased

Mr. J. S. CAMPBELL, Jr., owns the Clearview farm at Butler, Penna. A farm that is nationally known among Jersey breeders. It is the home of Volante's Dreaming Sam and many other noted cattle.

The splendid big dairy barn is Ney equipped throughout—walls, water bowls, litter carriers and pens. Ney engineers designed all the equipment. And here is what Mr. Campbell says about it: "The Ney equipment has been installed long enough to demonstrate the fact that cows are more easily maintained in proper physical condition than before, and it naturally follows that milk production is increased."

THE NEY MANUFACTURING CO.
Canton, Ohio
Established 1879

COW CONFORT
NEY MFG. CO., Canton, Ohio
Please send me, without charge, a copy of "Cow Comfort."
[] Check here if you want a copy of catalog No. 150

Name _____
Street or R. F. D. _____
City _____ State _____

THERE is dissatisfaction about the milk tests varying, and yet this condition is natural. As long as the variation is upward the seller is satisfied, but when the variation is the other way the patron says, "I have the same cows and feed the same. Why should the test not be the same?"

There are a dozen or more reasons why the test varies from time to time. Because the feed is the same the milk need not of necessity be the same, though a radical change of feed does affect the test. Almost every one knows the last milk or strippings are much richer in butterfat than the bulk of the milk. Several hurried milkings with little or no strippings would change the test. At the same time the hurried milker is impatient and soon the cow is nervous, and that means a lower test. You want to start early on the trip or come home late and the milking period is irregular, and that surely has an effect on the test. Possibly a few cows come fresh and are in good flush. The milk they give is above their average in fat for a little while, but soon the excess fat is milked down and the test is lowered. Extremes in temperature have an effect.

A cow may not be sick, but she is out of condition and for the time being that causes a variation. Often there is a variation and you search in vain for the cause thereof. I have noted such a condition often. Sometimes a few days later the cause was made clear in the condition of the cow, but often I never learned why the variation. But I repeat it is natural for the milk of an individual cow or of the herd to vary from time to time. Slovenly and careless taking of the sample or improper care of the sample or careless testing all may also account for the variation that the milk seller complains about.

Repairing Pastures

By all odds the best time for this work is late in the fall, during the winter and early in the spring. Stable manure applied during the fall and winter works wonders in pepping up the bluegrass and making the white clover mat and yield.

A prominent Lancaster county dairyman whom I visited often made a rule to cover a fourth of his permanent pasture with stable manure annually. Thus every four years the whole was covered. I never looked at his pasture but it kept ahead of the grazing cattle and his dairying was profitable. In August he would run the mower over the pasture and cut down any trash and the tufts of old grass and then the manuring started.

It is not good policy to say you cannot spare the manure because you have to put it on the wheat ground when that grain was sold by the farmers as October came in at 65c a bushel in the city markets of York. Then it had to be first-class wheat or it brought less. In the late eighties I sold wheat for 60c a bushel, and that was the worst in sixty years. No man in the East can grow wheat to sell at 65c a bushel. Our pasture grasses have made us a little money. The thing to do is to foster the department that helps us to make a living.

The application of superphosphate (acid phosphate) with the manure also pays well on about all soils, as the bluegrass is in need of this plant food and the stable manure is deficient in it. Six to eight spreader loads of manure and two to three hundred pounds of superphosphate to the acre will give fine results next season as well as a number of seasons following.

Time is also important to keep the bluegrass in good heart. The lime should not be applied with the ma-

nure but the season following or the season before.

If the pasture has been neglected a long while and there are thin or bare spots sow grass seed before applying the manure and it will thicken up splendidly.

If any foul trash springs up destroy it before applying the manure so the grass has the space and plant food.

Nurse your permanent pasture, as the cattle harvest and store the crop at no cost to you and you will have same profit on your investment.

Unprofitable Production

By E. J. PERRY

THE influence of unprofitable milk production on the amount of surplus dairy products is apparent to those who will study records dealing with the problem. In the light of the present surplus due largely to under consumption, it is appropriate that increasing attention be given to this subject. Below are the results of a study of the comparative efficiency of dairy cows of varying abilities in New Jersey. These figures are based on the production records and feed costs of 6,000 cows in 16 herd improvement associations. The price of 75 cents per pound of fat was used since this is the approximate average price now prevailing in the state. This is equivalent to \$2.63 per 100 pounds for milk testing 3.5 per cent fat and \$3 per 100 pounds for four per cent milk.

A most important present day question which every dairymen should be able to answer is, "How many cows do I milk to earn an annual return of \$2,000 over feed cost?" The following data are favorable to the high producer from the standpoint of economics and marketing:

Yearly Production per Cow	Yearly Feed Cost per Cow	Yearly Profit per Cow	Number of Cows of Each Group	Yearly Amount of Milk Sold (Gallons)	Yearly Amount of Fat Sold (Lbs.)
150	\$85	\$28	71	10550	8000
200	100	29	40	8000	6000
250	115	29	28	7000	5000
300	123	100	20	6000	4000
350	136	125	16	5000	3000
400	148	154	13	4000	2000
450	158	180	11	3000	1500
500	168	210	9	2000	1000

It is at once noted that it costs relatively less to feed the high producers than the low ones. The 400-pound herds eat only 46 per cent more feed than the 200-pound herds but return 208 per cent more profit and put on the market 54 per cent less of the product. The average annual production of the dairy cows of the United States is still less than 200 pounds of fat per cow. The reduction of the present cow population by 25 per cent through the elimination of most of those yielding less than 200 pounds of fat would do much to relieve the present problem of surplus dairy products. There has not been a time in recent years when it has been so essential to keep yearly records on individual cows as it is today. Intelligent culling requires a constant study of the production records.



The World's Best Milker

Want big Production Feed for Growth
Generally speaking, the well developed cow is the big producer. Calf feed is a vitally important matter to the dairy farmer raising his herd. Nothing takes the place of milk minerals—milk proteins—milk sugar—playing its own important part in the growth and development of the calf. And the amounts are important—don't hold back the milk, if you want "Milk Results." Be sure your calf gets her share—authorities recommend 10% to 25% of ration. If calf meals you buy do not contain specified amount—write for information on source of supply. Don't be satisfied with "contains skim milk"—ask "how much?"

American Dry Milk Institute, Inc.
1353.221 N. La Salle St., Chicago

feed MILK DRY SKIM MILK
De Laval Separator Company
CHICAGO SAN FRANCISCO
600 Jackson Blvd. 61 Beale St.

TO TENANT FARMERS

Why not BUY a farm at Attractive Prices with Low Cash Payment and Balance on Mortgage

Write for full information—Dept. B.
FEDERAL LAND BANK OF BALTIMORE
Baltimore, Md.

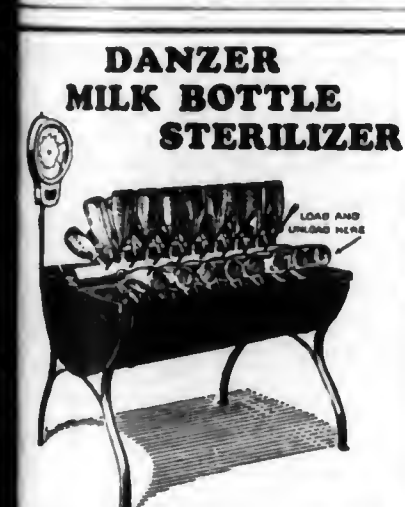
AYRSHIRES
MOST PROFITABLE COWS
Big Milkers • Hardy Rovers
Good Grazers • Perfect Udders
Ayrshire Breeders' Assoc.
205 E. 1st St., Dayton, O.



The DeLaval Magnetic has 15 Exclusive Features
Milk's foster, cleaner, gives longer and more reliable service than any other. SEE and TRY it—FREE of any charge.

See your De Laval dealer or write nearest office below.

De Laval Separator Company
CHICAGO SAN FRANCISCO
600 Jackson Blvd. 61 Beale St.



DANZER MILK BOTTLE STERILIZER
Danzer Metal Works
HAGERSTOWN, MD.

COWS give more milk
Pays to Clip with a STEWART
Stewart Clippers
Chicago Flexible Shaft Company
142 Roosevelt Rd., Chicago, Ill.



C. T. A. Reports

Mehoopany

THE Mehoopany Cow-Testing Association finished its second year with fifteen whole-year members. There were 389 cows in the Association during all or part of the year. Nine herds with an average of five or more cows exceeded in average production of 300 pounds of butterfat. A complete list of these herds as follows:

Owner	Breed	Milk	Fat
C. D. June	R.H.	10804	376.5
H. F. Brunges	R.&G.H.	9912	371.7
O. H. Love	G.H.	8793	342.5
Rodney Decker	G.H.	9781	335.9
Clarence Henning	R.H.	9336	319.4
L. R. Reynolds	R.&G.H.	8292	315.2
J. B. Sheehan	R.&G.H.	8581	308.8
Mrs. L. L. Fassett	R.G.	6445	305.5
B. B. Harding	P.H.	8633	302.4

Orin Henning, John J. Jaquish, Tester, County Agent.

Mercer County, No. 3

THE Mercer No. 3 Cow-Testing Association finished its eighth year with 26 whole-year members and two part-year members. The total number of cows was 569. Nine herds exceeded an average of 300 pounds of butterfat.

Owner	Breed	Milk	Fat
Ralph Brenner	R.J.	6141	359.1
E. S. Reichard	R.J.	7374	355.7
Jesse E. Smith	R.J.	6867	356.4
L. R. Cox	R.G.	6882	345.2
A. S. McCullough	R.G.	6885	338.1
H. E. Small	G.H.	8586	320.6
A. D. Willaman	R.&G.J.	7053	319.8
John McEwen	R.&G.J.	7356	310.7
W. H. Crawford	R.&G.H.	8383	300.1

E. B. DeWitt, W. S. Hagar, Tester, County Agent.

Wheat in Dairy Rations

Will you please let me have a formula for mixing grain ration for dairy cows? I have plenty of wheat that I wish to grind, also grinder and power. For roughage I have silage that was made from corn that did not ear well, would have made ten bushels to the acre or 15 bushels. I also have hay, timothy and clover, half and half.

A GOOD grain mixture for your dairy cows could be made up as follows: 100 lbs. corn meal, or corn and cob meal, or hominy feed, or ground wheat, or ground rye, or ground barley, or portions of two or more; 100 lbs. wheat bran or ground oats, or portions of each; 100 lbs. linseed oilmeal, or soy-bean meal, or peanut meal or portions of two or more; 100 lbs. of cottonseed meal, or gluten meal or portions of each.

Feed the grain mixture to Holsteins, Ayrshires or Brown Swiss at the rate of one pound of grain for approximately four pounds of milk. Jerseys and Guernseys may receive one pound of grain for approximately three and one-half pounds of milk.

A. A. Borland.

ALL grains for dairy cows should be rolled or ground rather fine, according to the U. S. Department of Agriculture, which furnishes the following information in its bulletin on feeding wheat to livestock:

With good pasture or with alfalfa, soy beans or Lespedeza hay equal parts of wheat, oats and barley make a suitable ration. It contains 12 per cent protein.

With legume hay and silage or mixed hay alone equal parts of wheat, oats and gluten feed is suggested. This contains 17 per cent protein.

With non-legume hay or silage, or with either alone, the following may be used: Equal parts of wheat, oats, gluten feed and cottonseed meal. This contains 23 per cent protein.

In general corn, wheat, barley and dried beet pulp may be used interchangeably in the above rations; dried brewers' grains may be fed in place of the gluten feed; linseed meal, soy-bean meal or peanut meal may be used in place of the cottonseed meal, if they are more available.

When mixed with twice its weight of other feeds wheat will not become gummy when masticated.



LARRO Keeps Her Hitting On All Four...

Do you have any two or three teated cows in your herd?

A cow with a lost quarter or two can no more produce milk at a profit than a carbon-clogged motor can pull a car up a hill on two cylinders. You've got to keep them hitting on "all four"!

Variation in the cow's feed upsets her health—causes off-feed condition and constipation—results in UDDER TROUBLE and very often lost quarters.

Larro Dairy Ration is a protector of good udders for the same reason it is an unequalled milk producer. Larro builds health that boosts production and holds it up. Larro builds health that eliminates off-feed days, constipation and UDDER TROUBLE.

Larro Health and greater dairy profits are facts—facts that prove themselves wherever and whenever Larro is fed—for Larro is always the same, yesterday—today—tomorrow.

Put your cows on Larro! Keep them "hitting on all four" then—you'll get better results from every cow—and more profit.

THE LARROWE MILLING COMPANY
DETROIT, MICHIGAN



Larro

FEEDS THAT DO NOT VARY FOR POULTRY, HOGS AND DAIRY

Larro Family Flour, best for Bread, Biscuits, Cakes and Pies



HERD INFECTION

Dr. Roberts says: "Watch out for symptoms of HERD INFECTION, such as Failure to Breed, Failure to Clean, Scours and Colters in Calves, Garget, Cow Pox and Shortage of Milk. There may or may not be a loss of Calves. Send in a confidential report of your herd and Dr. David Roberts will tell you without charge what is wrong."

Ask for a free copy of "The Cattle Specialist" and how to get the "Practical Home Veterinarian" a live stock doctor book.
DR. DAVID ROBERTS VETERINARY CO., INC.
126 Grand Ave., Waukesha, Wis.

BE SURE TO SAY "I saw your advertisement in Pennsylvania Farmer" when writing advertisers.

Farmer's Business Letter

INDUSTRIAL leaders of the nation were gathered in Chicago this week to listen to discussions of the business situation and outlook, but nothing very definite as to means of improvement or very encouraging as to the future came out of their sessions. In other words, there is not much that can be done about it. However, the government unemployment relief undertaking is taken seriously, because it is recognized that with proper effort many men can be given work of one kind or another to help tide them over the winter. By comparison with other business farming is not so bad at this time, and its outlook is rather more promising than most anything else. Farmers, themselves, are not last to realize this.

Some Strength in Grains

Undertone in the wheat market is considered good. Both wheat and corn showed a net gain of about two cents this week. Nothing startling is looked for but rather a creeping advance that will carry prices of wheat at least, some higher before winter is past. Farmers are not only feeding wheat but apparently are in no hurry to move it. A Kansas report estimates 65,000,000 bushels still on farms in that state on October 1, against 44,000,000 on the same date last year.

Corn husking reports are extremely spotted, ranging all the way from 5 to 70 bushels to the acre. That reflects the situation as it is in all sections, and the result is a wide variation in opinion as to what the crop amounts to this year. The shortage is not to be doubted, however, and naturally it will make itself felt more in 1931 than during the remainder of this year.

Many Light Hogs

Hog marketing during October has exceeded expectations. However, the opinion still prevails that the supply available for the winter packing season will run smaller than the average, and coupled with small storage stocks at this time will mean continued strong demand for hogs. While many hogs are being marketed, weights are running light, the average here this week being only 229 pounds, against 241, the average for the same week during the past five years.

Eleven markets had 477,000 hogs this week, a gain of 30,000 over last week but 14,000 under the same week last year. The price level sagged early in the week under the weight of large runs, but later there was some recovery. Average price for the week at \$9.35 was 15c under last week but only a dime under the same week last year. Confidence in a future level of hog prices that will mean continued profits on production is general.

In the future market trade was light this week, prices being practically unchanged from last week. Light weights sold at \$8.75 to \$8.85 for December and January delivery, and medium weights at \$8.80 to \$8.85 for delivery during the same two months. Some hold that hogs are likely to prove to be a good buy at these prices, though of course others in the trade disagree or the quotations would be higher.

Two-Way Cattle Market

It has been a two-way cattle market this week, top grades being strong to 25c higher and the plain kinds weak to 25c lower. Top yearlings advanced to \$13.50, a gain of 15c over last week, while top on heavies at \$12.60 was a dime higher. Not quite so many cattle sold at \$12.75 and up as last week. The runs of westerns were largest of the season, and this affected trade on the plain kinds of cattle. It also affected stockers and feeders where trade was about a quarter lower even with a pretty good demand. Average price of steers was figured at \$10.35, which was 15c up from last week, and highest since the week of September 27. Receipts of cattle here were second largest of the year.

Feeder movement so far this season has been far below last year which in turn was far below the year before. A competent review of feeder trade points out that October always brings the biggest movement of feeder cattle, practically one-fifth of the year's movement occurring within the month. From July 1 to the close of October each year, practically one-half of the entire year's movement to feed lots occurs and by the close of November each year 60 per cent of the whole year's movement has gone to the feed-

ing grounds. Approximately 600,000 cattle have gone from the twelve markets to the corn belt since July 1. On the basis of former years, this would indicate around a million cattle to be available this year for slaughter and foreshadows a considerable reduction in federally inspected slaughter, confirming the belief that there will be a materially reduced beef production in feed lots this winter.

Ask More for Lamb

It was also a two-way lamb market but of quite a different kind than in the case of cattle. Lambs on the hoof were materially lower but dressed lamb at wholesale was materially higher. It was regarded as a big grab for the slaughterers, and there was a little criticism. Best lambs sold at \$9.50 early in the week, and at the close top was \$8.25. Fresh lamb at wholesale was quoted at 12¢ to 18¢ last week and at 15¢ to 20¢ this week. No doubt this advance is made possible by the fact that continued effort to promote the demand for lamb is being pushed vigorously and is having some effect. For the first nine months of the year lamb consumption increased 17.6 per cent over the same period last year, and it is argued that this means a vast increase in the number of customers for lamb that will have a very noticeable effect when supplies become somewhat reduced. On this basis it is figured that for the long pull the outlook is favorable, but for some time to come it is entirely probable that there will be too many lambs.

Western runs are dwindling, the season being thought to be nearly over. Demand for feeders has continued very good, and there was a call for the best this week at \$7.25 to \$7.40, with \$6.50 taking the bulk of desirable kinds.

Changes in Meat Business

Great changes are taking place in the meat business, all favorable from the standpoint of the producer. First of these was the stamping and grading of fresh meats, giving to consumers for the first time some guaranty of quality. Then came the packaging and quick-freezing of meats, and the experimental stage, but in the opinion of experts destined to be successful. This will mean a vast increase in the retail outlets for meats, since the packaging will permit all kinds of stores to supply the trade efficiently and conveniently. The chains are already in the meat business and the packers may follow if they succeed in having

the consent decree set aside, hearings on that now being in progress. A new day in the retailing of meats is dawning, the experts tell us, and the producers are certain to be greatly benefited.

Chicago, Oct. 25, 1930 Watson

Reduced Rates Extended

LAST summer the U. S. Department of Agriculture and the Interstate Commerce Commission arranged for reduced freight rates on outbound shipments of livestock and inbound shipments of feed in counties officially listed as drouth areas. This privilege was to expire with October, but it has been extended to November 30.

INTERNATIONAL LIVESTOCK EXPOSITION

Entries are beginning to descend on the nation's premier livestock show, the International Livestock Exposition, to be held in Chicago this year November 29 to December 6, in quantity to give assurance of another stupendous exposition of the finest specimens of feedlot, stud and field. Again will the international aspect of this famous show be upheld by exhibits from almost every corner of the earth where farming holds a place of importance. Already have samples been received from three New South Wales wheat growers for the Grain and Hay show competition, as well as practically every province of Canada and state in the Union.

Youthful Side Important

In keeping with the growing importance of the younger side of the Exposition, as seen in the ever enlarging Junior Livestock Feeding Contest, the premiums awarded in this department have been greatly increased. The fact that at the 1928 International the grand-champion steer of the show came from the junior contest, and at the last Exposition was shown by a lad who was just over the age limit to take part, but who in former years had been a successful contender in this division, is testimony to the increasing importance of young people at the Chicago Show.

An increased number will participate this year in the National Boys and Girls' Club Congress, held within the gates of the Exposition. The Management states that there will be 1,400 selected farm boys and girls from 41 states taking part in the contests and conferences of this Congress.

Big Horse Show Promised

An eye-filling entertainment feature of the Exposition is the International Horse Show which will be set for November 10 to 12. It will again provide the setting for the keenest competition between the finest specimens of the leading stables of the world, which will be on hand each year for this wind-up of the horse show season. Closing dates for making entry of exhibits in the several different departments of the Exposition has, according to the Secretary, been set for November 10, the individual livestock class, November 10th for the Grain and Hay Show, and November 22nd for the carload lots of cattle, sheep and swine.

LIVESTOCK

PITTSBURGH

Cattle

Monday's supply was about 55 carloads and it included a large proportion of common stuff of all kinds. A few good fat steers brought \$9.99 to \$10.00, these being straight grassers. One load that had eaten some grain sold at \$9.25 and a few choice grain-fed steers up to \$10.25. These were fed by J. G. Lucas, of Harrison county, W. Va., and were well finished. Most of the fleshy steers sold at about last week's prices. Useful fleshy steers brought \$8.50 to \$8.75, both handy and heavier kinds, while fair lighter steers went at \$7.75 to \$8 and ordinary light butchers \$6.60 to \$7. A few of inferior quality and condition \$5.50 to \$5.75. Heifers were not numerous, good fat kind selling at \$7.25 to \$7.50, with useful killers at \$6.75 to \$7 and others on down to \$5. A few young fat cows brought \$5.50, but \$5 was about the limit on good aged cows, not many above \$4.50. Canners went at \$2.50 to \$3, bulk at \$2.75. Very few good butchers bulls were here but the demand was slack for all kinds. A few brought \$6.25 to \$6.50, but \$6 was about the top at the close and not many went above that figure.

Monday's Representative Sales

No.	Wt.	Pr.	No.	Wt.	Pr.
3	1113	10.25	2	1245	9.50
2	1170	9.25	22	1309	9.10
16	961	8.00	8	1380	8.75
10	1269	8.75	9	1217	8.60
6	942	8.50	4	1070	8.40
6	1125	7.75	15	1081	7.50
5	881	7.25	19	1099	7.00
12	782	6.75	6	910	6.75
5	810	6.75	6	910	6.50

Sheep

Monday's supply was about 35 double-deck carloads. Bids were all lower, with plenty of hogs in sight at all markets, and sales were generally at a quarter below last week's closing prices. Good hogs of all weights about 160 lbs. sold mainly at \$10, some 150-pound hogs of nice quality going to \$11. Light and piglets were not numerous, good ones both classes selling at \$9.75. Most of the hogs now coming are neither heavy nor light, running largely to 170-200 pound weights. Bulk of cows brought \$8.50, a few \$8.75. Heavy Yorkers, 155-180 lbs., \$9.50 to \$10. Light Yorkers, 125-150 lbs., \$9.25 to \$9.75. Pigs, 90-100 lbs., \$9.50 to \$9.75. Roughs, \$8.25 to \$8.75. Stags, \$4.00 to \$6.00.

Swine

Monday's supply was about 35 double-deck carloads. Bids were all lower, with plenty of hogs in sight at all markets, and sales were generally at a quarter below last week's closing prices. Good hogs of all weights about 160 lbs. sold mainly at \$10, some 150-pound hogs of nice quality going to \$11. Light and piglets were not numerous, good ones both classes selling at \$9.75. Most of the hogs now coming are neither heavy nor light, running largely to 170-200 pound weights. Bulk of cows brought \$8.50, a few \$8.75. Heavy Yorkers, 155-180 lbs., \$9.50 to \$10. Light Yorkers, 125-150 lbs., \$9.25 to \$9.75. Pigs, 90-100 lbs., \$9.50 to \$9.75. Roughs, \$8.25 to \$8.75. Stags, \$4.00 to \$6.00.

Common to fair heifers	5 00/9 6 00
Choice fat cows	4 00/9 5 00
Good to choice fat cows	4 50/9 5 00
Fair to good cows	4 00/9 4 50
Common to fair cows	3 50/9 4 00
Fair to good heifers	4 00/9 4 50
Good to choice heifers	4 50/9 5 00
Choice heavy bulls	6 00/9 6 25
Choice handy butchers	6 25/9 6 50
Good handy bulls	5 75/9 6 25
Fair to good bulls	5 50/9 6 00
Common to fair bulls	4 50/9 5 25
Interior bulls	4 00/9 4 50

No.	Wt.	Pr.	No.	Wt.	Pr.
3	1113	10.25	2	1245	9.50
2	1170	9.25	22	1309	9.10
16	961	8.00	8	1380	8.75
10	1269	8.75	9	1217	8.60
6	942	8.50	4	1070	8.40
6	1125	7.75	15	1081	7.50
5	881	7.25	19	1099	7.00
12	782	6.75	6	910	6.75
5	810	6.75	6	910	6.50

No.	Wt.	Pr.	No.	Wt.	Pr.
3	1113	10.25	2	1245	9.50
2	1170	9.25	22	1309	9.10
16	961	8.00	8	1380	8.75
10	1269	8.75	9	1217	8.60
6	942	8.50	4	1070	8.40
6	1125	7.75	15	1081	7.50
5	881	7.25	19	1099	7.00
12	782	6.75	6	910	6.75
5	810	6.75	6	910	6.50

Sheep and Lambs

Last week's lamb market closed a dollar below the opening price, while sheep were half a dollar lower. Monday's supply

was liberal, about 30 double-deck carloads including hold-overs. Sheep were very dull and lower, the best here going at \$3.75 but not many selling even on a basis. These were not fed sheep but were almost unsalable. Lambs were a quarter lower, with tops at \$7.75 and a quarter less \$5.50 to \$6. Medium class of lambs brought \$5.50 to \$6, some with flesh \$7.25. Common light lambs were very dull and lower, selling at \$4.45 to \$4.75. Most of the lambs found buyers and trade was fairly active after the price had been established. Good to best wethers \$3.50 to \$3.75. Fair to good, do. \$3.00 to \$3.25. Common to fair \$2.00 to \$2.25. Inferior sheep \$1.00 to \$1.25. Good to choice lambs \$7.00 to \$7.25. Medium, do. \$6.50 to \$6.75. Culls and common, do. \$4.00 to \$4.25.

Calves

Monday's supply was light, around 10 head, and the market steady at \$13.50 for best veal calves. Good seconds brought \$10.91 and others largely \$7.93.

LANCASTER

Cattle

Receipts totaled 3,350 head. Beef steers and yearlings were slow and weak to 25c lower. Best 1,400-lb. steers sold at \$10, while best medium weight went at \$9.75. Bulk of sales was at \$7.50 to \$8.25. Bulls, stock and cutters were about steady, while stockers and feeders were steady to stronger. With 150 calves on sale the market was 25¢ to 50¢ lower, choice vealers going at \$13.50 to \$14.00. Medium to good steers, 800 to 1,100 lbs., \$8.00 to \$9.00. Medium to good steers, 1,100 to 1,300 lbs., \$8.25 to \$9.00. Good heavy steers, 1,300 to 1,500 lbs., \$8.50 to \$9.25. Good to choice heifers, 800 to 1,100 lbs., \$7.50 to \$8.25. Common to medium, 800 to 1,100 lbs., \$6.50 to \$7.25. Good to choice cows, 800 to 1,100 lbs., \$6.00 to \$6.75. Cutters and canners, 800 to 1,100 lbs., \$5.50 to \$6.25. Good to choice bulls, 800 to 1,100 lbs., \$6.75 to \$7.25. Common to medium, 800 to 1,100 lbs., \$5.00 to \$5.75. Stockers and feeders, 800 to 1,100 lbs., \$5.25 to \$5.75.

Swine

A thousand head was on sale. Market steady with top at \$11. Good and choice (160-180 lbs.) \$10.50 to \$11.00. Good and choice (180-200 lbs.) \$10.00 to \$10.50. Good and choice (200-250 lbs.) \$9.50 to \$10.00. Good and choice (250-350 lbs.) \$9.00 to \$9.50. Packing sows, 250 to 350 lbs., \$7.50 to \$8.00.

CHICAGO

Cattle

Chicago, Oct. 27.—Twenty-seven thousand head was on sale. The market was steady to 25c lower with top at \$13.25. Part of one load sold at \$13.25. Common to fair steers, 800 to 1,100 lbs., \$8.50 to \$9.25. Fair to best yearlings, 800 to 1,100 lbs., \$8.00 to \$8.75. Common to best heifers, 800 to 1,100 lbs., \$7.50 to \$8.25. Fair to best cows, 800 to 1,100 lbs., \$7.00 to \$7.75. Fair to best bulls, 800 to 1,100 lbs., \$6.50 to \$7.25. Canners and cutters, 800 to 1,100 lbs., \$6.00 to \$6.75. Veal calves, common to best, 800 to 1,100 lbs., \$5.50 to \$6.25. Feeders, common to best, 800 to 1,100 lbs., \$5.00 to \$5.75. Stocker and feeder heifers, 800 to 1,100 lbs., \$4.50 to \$5.25. Stocker and feeder cows, 800 to 1,100 lbs., \$4.25 to \$4.75.

Hogs

Receipts totaled 50,000 head, including 23,000 direct to packers. The market was steady to 15c lower. Bulk sold at \$8.99 to \$9.40. Best pigs \$8.75 to \$9.25. 140-160 lbs., \$9.00 to \$9.25. 160-180 lbs., \$8.75 to \$9.00. 180-200 lbs., \$8.50 to \$8.75. 200-220 lbs., \$8.25 to \$8.50. 220-240 lbs., \$8.00 to \$8.25. 240-260 lbs., \$7.75 to \$8.00. 260-280 lbs., \$7.50 to \$7.75. 280-300 lbs., \$7.25 to \$7.50. 300-320 lbs., \$7.00 to \$7.25. 320-340 lbs., \$6.75 to \$7.00. 340-360 lbs., \$6.50 to \$6.75. 360-380 lbs., \$6.25 to \$6.50. 380-400 lbs., \$6.00 to \$6.25. 400-420 lbs., \$5.75 to \$6.00. 420-440 lbs., \$5.50 to \$5.75. 440-460 lbs., \$5.25 to \$5.50. 460-480 lbs., \$5.00 to \$5.25. 480-500 lbs., \$4.75 to \$5.00. 500-520 lbs., \$4.50 to \$4.75. 520-540 lbs., \$4.25 to \$4.50. 540-560 lbs., \$4.00 to \$4.25. 560-580 lbs., \$3.75 to \$4.00. 580-600 lbs., \$3.50 to \$3.75. 600-620 lbs., \$3.25 to \$3.50. 620-640 lbs., \$3.00 to \$3.25. 640-660 lbs., \$2.75 to \$3.00. 660-680 lbs., \$2.50 to \$2.75. 680-700 lbs., \$2.25 to \$2.50. 700-720 lbs., \$2.00 to \$2.25. 720-740 lbs., \$1.75 to \$2.00. 740-760 lbs., \$1.50 to \$1.75. 760-780 lbs., \$1.25 to \$1.50. 780-800 lbs., \$1.00 to \$1.25. 800-820 lbs., \$0.75 to \$1.00. 820-840 lbs., \$0.50 to \$0.75. 840-860 lbs., \$0.25 to \$0.50. 860-880 lbs., \$0.00 to \$0.25. 880-900 lbs., \$0.00 to \$0.25. 900-920 lbs., \$0.00 to \$0.25. 920-940 lbs., \$0.00 to \$0.25. 940-960 lbs., \$0.00 to \$0.25. 960-980 lbs., \$0.00 to \$0.25. 980-1000 lbs., \$0.00 to \$0.25.

Sheep

About 20,000 sheep and lambs were on sale. The market was steady. Native lambs \$6.00 to \$6.25. Western lambs \$5.75 to \$6.00. Feeding lambs \$5.50 to \$5.75. Wethers \$5.25 to \$5.50. Yearlings \$5.00 to \$5.25. Ewes \$4.75 to \$5.00.

COMING EVENTS

Nov. 6-7.—W. Va. Dairyman's Assn. annual meeting, Moundsville, W. Va.
Nov. 6-8.—National Cooperative Milk Producers' Federation, Des Moines, Iowa.
Nov. 12-21.—Annual Convention of National Grange, Rochester, N. Y.
Nov. 15-18.—American Royal Livestock Show, Kansas City, Mo.
Nov. 19-27.—Royal Winter Fair, Toronto, Canada.
Nov. 20-22.—Fifth Annual Conference of Farmers' Cooperative Associations, State College, Pa.
Nov. 29-Dec. 6.—International Livestock Exposition, Chicago, Ill.
Dec. 2.—American Institute of Cooperation, mid-winter meeting, Chicago, Ill.
Dec. 3-7.—Chicago Cattle Show, Exposition, Chicago, Ill.
Dec. 8-10.—Twelfth Annual Convention of the A. F. B. E. at Boston.
Dec. 9-11.—Pennsylvania State Grange, Pottsville, Pa.
Jan. 19-21.—Farm Products Show, Harrisburg, Pa.

NEW YORK MILK PRICES

The Dairyman's League price for 35 per cent milk, delivered to the 20-21 mile zone, is \$2.21 for September. Sheffield's price for 3 per cent milk in the 20-21 mile zone is \$2.56.

Philadelphia Produce Review

HEAVY frosts throughout the near-by producing sections resulted in receipts of vegetables in east markets. The worst feature was the mixture of frosted stock in the shipments. The cooler weather stimulated the demand for some of the vegetables and southern states are preparing to supply the eastern markets with potatoes, string beans and other such products. Potato harvesting in Pennsylvania and New York is practically completed and it is not believed that the frost will do any serious damage to the potato crops. Some damage by frost was reported in Idaho and Colorado, but according to the early reports it affected only a small part of the crop. Potato shipments from all sections of the country have been somewhat lighter. One cause for this was the recent decline in prices and several recent points report that growers are now holding for higher prices. The market has shown some improvement, although it has not brought any material price changes. Supplies in east city markets have been moderate and the demand fair.

A Wide Range

Pennsylvania white wines show a wide range in price due to the variation in quality and grade. Stock that would hardly pass U. S. No. 1 grade has sold at \$1.85 to \$1.75 per 100-pound cask in Philadelphia, while stock of better quality brought \$1.80 to \$1.95. At present the best potatoes are arriving by truck and jobbing sales range from \$1.50 to \$1.75 per 100-pound cask. The general range of Maine Green Mountains in eastern markets was \$1.75 to \$2 per 100-pound sack.

The sweet potato market in Philadelphia has been poor during the week and dealers report that it is very difficult to sell any quantity without making price concessions. Other markets report steady prices and a moderate demand. Most New Jersey sweets sold at \$2.25 to \$2.50 per bushel, while Eastern Sweet potato ranged from \$1.00 to \$1.25. Many dealers believe that the cooler weather will have some effect on the demand for sweets.

Apples Steady

The apple market has shown but little change during the week. Prices of well colored fruit of desirable varieties are fairly satisfactory, but large quantities of average stock sell slowly. Shipments during October have been running heavy, but the majority of the shipments have been going into cold storage. Storage holdings early in October were 7 per cent larger than at the same time last year and 23 per cent above the five-year average for the month. Holdings in barrels were light but boxes and bushel baskets were plentiful.

Rampan, Yorks, Grimes and Romes have been selling at \$1.45 per barrel in the West Virginia apple section. In Philadelphia, Romes, Stayman, Dell, Pinks, Black Twigs, King David and other miscellaneous varieties of good quality have sold at \$1.15 to \$1.25 per bushel. The better grades of these varieties have brought \$1.35 to \$1.50 and there have been enough sales above \$1.50 to indicate that buyers are willing to pay a premium for something extra fancy.

On the other hand, drops and the poorer grades of handpicks have sold at 50¢ to 75¢.

Eggs Firm

The egg market was firm in Philadelphia on fancy fresh eggs with the 1928 or 1927 crops, according to the report issued by the Pennsylvania Federal-State Crop Reporting Service, Harrisburg. The decrease in the principal area of commercial supply, the states from the Dakotas to Texas and westward, amounts to about ten per cent. The increases in other sections, which tended to offset the decrease in the commercial area, were mostly in the east central states being largely in the states where the drought of last spring and summer was most severe. For the country as a whole, the proportions of the turkeys that would be ready for the Thanksgiving and Christmas markets this year were reported as practically the same as last year. About 52 per cent will be ready for the Thanksgiving market, 28 per cent for the Christmas market and 11 per cent later in the season. The heavy turkey crop this year is estimated to be eight per cent larger than last year. About 52 per cent will be ready for the Thanksgiving market, 28 per cent for the Christmas market and 11 per cent later in the season. The heavy turkey crop this year is estimated to be eight per cent larger than last year. About 52 per cent will be ready for the Thanksgiving market, 28 per cent for the Christmas market and 11 per cent later in the season.

The New York market was steady during the early part of the week with slight advances at the close. Top quality white eggs were in more active demand, while browns closed about 2c higher. Nearby henry white eggs sold at prices ranging from 22c for very small up to 55c for closely selected extras. Brown eggs brought 29¢ to 32c and mixed colors 18¢ to 40c.

Butter and Poultry

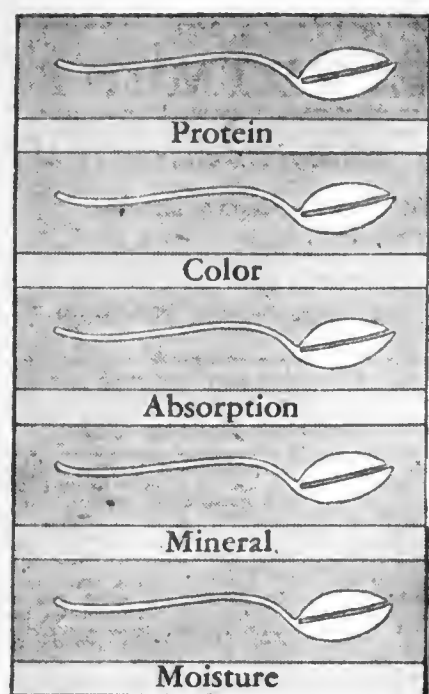
Butter prices in Eastern markets were unchanged during the week but trading was slow on all except top grades. The proportion of fine butter in the arrivals was small and this class of goods sold fairly well. Medium and undergrades were more than ample for the demand and prices were irregular. The tone of the market was uncertain and nervous.

Receipts of live poultry in New York were liberal toward the end of the week and the market weakened. Leghorn fowls sold at 10¢ to 11¢ per pound, colored fowls at 15¢ to 24¢. Rock chickens at 25¢ to 30¢. Reds at 15¢ to 20¢ and Leghorns at 15¢ to 18¢. Dressed poultry met a slow demand with broilers bringing 20¢ to 34c, chickens 24¢ to 30c and fowls 20¢ to 25c.

Insurance Secretary Resigns

The members of the Grange Mutual Fire Insurance Company of W. Va., Secretary, Mr. L. A. Payne, who has been the very efficient secretary of the Company for more than twenty-four years, has resigned. Had he filled the position until the first day of January, 1931, he would have served the Company a quarter of a century. During that time by his very courteous and kind treatment he has made hundreds of friends among the members of this company. Each year his accounts have been audited by a capable committee and not a single mistake worth mentioning has ever been found.

During these years he has collected and paid out thousands of dollars. With one exception no suit has been brought against the Company, and the higher court sustained the action of the Company in this suit.



"Balance"
the most important thing
about your recipe—
the most important thing
about your flour



"Balanced"

The Pillsbury "balancing" process mixes as many as sixteen different types of the finest wheats. The result is a flour which contains just the right amounts of protein, mineral, moisture, etc. — a flour perfectly "balanced" for all kinds of baking.

Every day more women discover that Pillsbury's Best has some quality not found in other flour. They don't know what it is, but they know it's there. Because everything they bake—bread, biscuits or pastry — turns out better. Because everything has a delicate, unmistakably richer flavor.

Pillsbury's Best is different. It is scientifically "balanced" for successful baking. "Balanced" according to a wheat combination used only by Pillsbury. There is no other flour just like it. Pillsbury's Best is made from no single variety of wheat—for no single type of wheat contains just the right amount of protein, mineral, etc., to work perfectly for all baking. Pillsbury's Best is made from

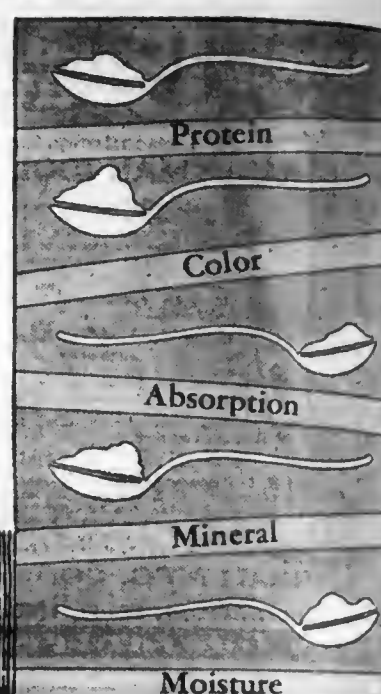
Pillsbury's
"balanced" for

PILLSBURY FLOUR MILLS COMPANY • General Offices Minneapolis, Minnesota



Best Flour
perfect baking

Pillsbury's Best Flour, Pancake Flour, Wheat Bran, Farina, Cake Flour, Rye, Graham and Durum Flour



"Unbalanced"

All these different substances are found in wheat when it is harvested. But they are not properly "balanced" for baking. No single variety of wheat contains these things in just the right quantities to make the finest all-purpose flour.

a special blend of different types of finest wheat. Each of these different wheats has some quality necessary to the perfectly "balanced" flour.

You know your recipes must be properly balanced—that you must use just the right amount of each ingredient. It's just as important to use a perfectly "balanced" flour. Try Pillsbury's Best. You'll discover how *good* baking can become really *perfect* baking. If you bake bread, you'll get better bread. When you bake biscuits or pastry, you'll find a striking improvement in appearance and flavor.

There's a real difference—ask for the "balanced" flour — Pillsbury's Best. Your grocer has it.

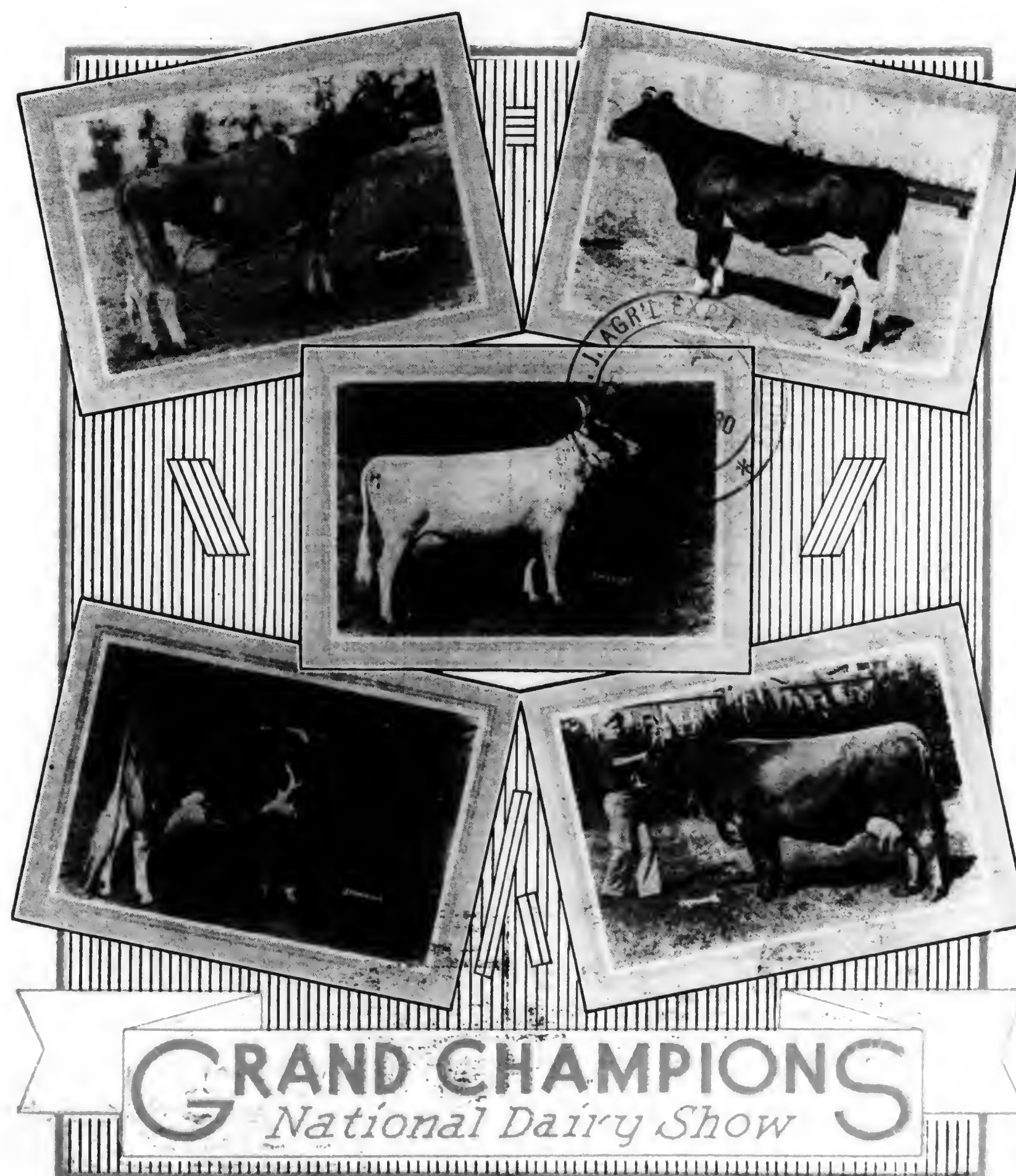
PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

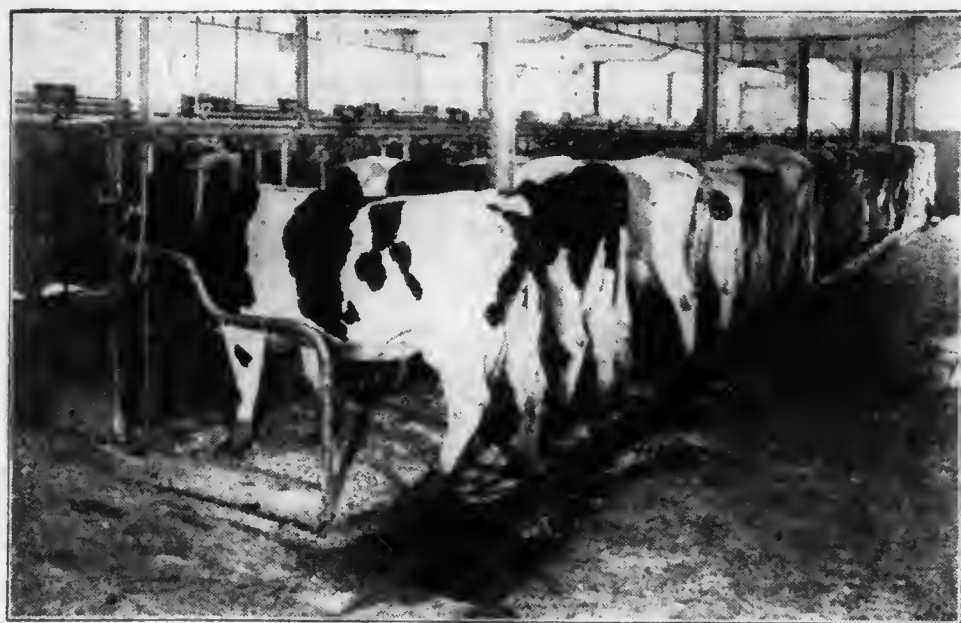
November 8, 1930



Philadelphia

Pittsburgh

Harrisburg



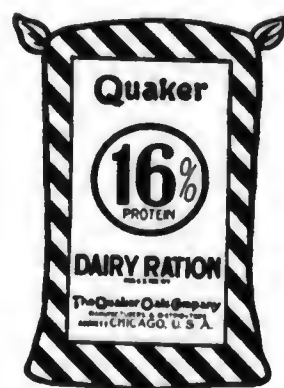
Quaker owned Holstein-Friesian cows used in making dairy feed experiments at Monona Farm, Madison, Wis.

Feed the Right Ration for Winter Milk Making and Pocket More Profit

WINTER... ice... snow... higher dairy product prices. Now's when your better business judgment insists that each cow start giving you her best milk-making effort. And to obtain her best effort, it is good business for you to provide her with a Quaker ration that she can readily turn into milk.

Quaker 16% Dairy Ration is a concentrated, milk-making dairy feed—an ideal winter ration. Cows respond to it quickly and remain in excellent condition while under heavy production. It is uniform and economical; feeds well with home-grown roughages. The Quaker dealer in your vicinity will tell you more about why it's good business to feed Quaker 16% Dairy Ration.

If your local feeding conditions make a higher protein ration desirable, Quaker 20% Protein Dairy Ration or Quaker 24% Dairy Ration is built to fill your needs.



THE QUAKER OATS COMPANY, CHICAGO, U. S. A.

Quaker Sugared Schumacher—is the complete carbohydrate feed; combines perfectly with any Quaker high protein concentrate (24%, 20% or 16%). A choice feed for all young or dry stock; an entire grain ration for horses, steers, lambs and swine.

BUY QUAKER FEEDS IN STRIPED SACKS

Farm Facts and Fancies

By ALVA AGEE

WE accustom ourselves to things with which we have grown up, and a suggestion of change seems to many erratic or radical. In the case of using the possession of property as a dependable test of ability to contribute to costs of government we overlook the fact that it is only one of several tests which have been tried out in the past and are being used today. There is nothing sacred about this property test at all, and many developments in the last fifty years have emphasized its failure to serve by itself with a reasonable degree of justice.

Intangible Property

The growth of forms of wealth that are certainly intangible from the standpoint of the assessor has been immense. If all wealth were brought within sight of the tax collector, and bore an even rate, there would be far less room for criticism of our persistence in retaining property as the chief criterion in determining each one's ability to pay toward support of the government. But this is not the case, and in the nature of things cannot be brought about.

We are wasting time criticizing our officials for failing to see the invisible. Intangible evidences of possession of corporate property and of credits will continue to increase as our country grows, and the tax rates within states and county borders continue to be applied to what is in sight and intangibles that owners choose to list. We raise our level of public expenditure because, as a people, we are richer, and leave property obviously in sight to pay a great part of the cost.

Another Cause of Breakdown

Earning power largely determines ability to contribute to cost of government. Today that is wholly dissociated from the possession of property in the case of millions of people. Our higher civilization has brought a demand for the services of a great army of trained men and women, and their earning power would have seemed an incredible thing even fifty years ago.

It is idle to make a guess at numbers, but surely we have millions of people among us who have ability to pay taxes to meet public expenses and yet have very little tangible property. They want a high level in the facilities the public provides for itself, and are a strong influence on that side, but the property test to determine what they should pay in the form of taxes leaves a great majority untouched. They are not blameworthy when they list any property they have; the fault lies in depending on a system for testing the ability to pay taxes that is a misfit under modern conditions. Leading European countries have recognized the fact, and have turned to several different tests as supplements, but most of our states retain the property tax as the chief means of raising revenue, and the result is staggering to the farmer.

Who Should Pay?

When we turn to net income as a basis for determining what share each one should have in cost of government we are met by various objections. We are told that nothing must be done in this country to cut down the level of living, and that the great majority of salaried and professional and high-waged folks have no surplus at the end of the year and would have to reduce the family's level of living if they had to share income with the public. Why not be first concerned with the reduction in the farmers' level of living due to contributing not only their own share but all that is not paid by others? It is a wholesome thing even for a family on a modest salary to contribute something to relieve those overburdened

through paying their own share of that of such a family.

Certainly I do not know what minimum for income-tax purposes should be and, just as in every other system of taxation, there are difficulties and there could be only gradual growth toward perfection. I do present the effect of taxation on the level of living in the farm home that is due to an unfair system as a reason for substituting a system that would cause all people to pay according to ability. Such a taxing system would make net income the chief criterion, but doubtless would make of a property tax where the interest of justice demanded.

The specific provisions of an income tax are something wholly aside from this discussion. I am only insisting that the property tax has become an unfair burden and that enlightened peoples are turning more and more to net income as an important criterion for determining what contribution each one should make toward the cost of the public services that we demand and provide in a lavish way.

Dependability of Public Revenue

Many objections can be urged against a tax based on income. There are serious grounds for criticism of any system of taxation. Possibly the most insistent objection is that public needs dependable revenue, and incomes are variable from year to year. The thought is that if at times cut down the revenue of all people, we need something in sight that we can appropriate to enable us to carry on, and real property meets the requirements. It can be levied regardless of the farmers' income, all is well with public affairs. The unlisted wealth of the taxing district still goes free, the earning power of salaried folks is untouched, and real property is the insurance that the public revenue will be sufficient.

I recognize the difficulty, but do not see why a taxing district that is temporarily disappointed in amount of revenue obtained in large measure from an income tax should not come a borrower for the time rather than to compel farmers to become borrowers in order that a deficit public revenue may be met. Our consideration should be justice, and gradually we would learn to meet the difficulties found in a just system.

On the Cover

THE grand champion cows of the breeds exhibited at this year's National Dairy Exposition are shown on our cover this week. The Jersey, the upper left-hand corner is Blanche Cunning Mouse, owned by J. S. Worth, Simsbury, Conn. She was grand champion at Detroit in 1929. The Holstein, upper right, is Lassie Ormsby, owned by C. E. Griffith, Big Cabin, Okla. Third prize, Madge 4th, the Ayrshire shown in the center, is owned by Sycamore Farms, Douglassville, Pa. At lower left is seen Moose Valley Minnie, Guernsey, owned by Boulder Brink Farm, Excelsior, Minn. The Brown Swiss, lower right, is King's Peppy, owned by Phyllis Torbel, owned by H. Bros., Painesville, Ohio. She won similar honor a year ago.



WE GUARANTEE THE FOUR VITAMINS EVERY LAYING HEN NEEDS



In this feed, Vitamins A, B, D and E are KNOWN to be Present and Potent

Four vitamins are essential to everything a poultryman prizes. Flock health, eggs, vigor, fertility! What a price to pay if there's any question about the vitamin value of feed!

Pratts have settled the vitamin question. They purposely *make sure* of enough Vitamins A, B, D and E to keep up health, laying ability, vigor and fertility.

We don't say that all other mashes lack vitamins. We do say that Pratts are the first to *make sure* that an effective amount of these four essential vitamins are in every bag of laying mash.

The nutritive value of Pratts is well known and undisputed. By scientific processes and special ingredients it is now guaranteed complete in vitamins. Think what that means. It means enough sun Vitamin D to keep birds vigorous, strong and laying during the cold dark days of winter. You need not buy cod liver oil or any other extra vitamin mixture for Pratts.

And of very great importance is Vitamin E. Where feed is deficient in

Vitamin E, unhatchable eggs result. Now at no extra cost, simply by feeding Pratts laying mash instead of some other, you can be sure that breeders won't give you unfertile eggs because of any vitamin lack in feed.

Vitamin E can be stored in the body long in advance of the hatching season. When fertile eggs are at stake, why not be sure hens are getting a surplus from now on? Every mouthful of this mash is more insurance that you'll get fertile eggs next January and February.

Pratts now provide the choicest cereals, the best of animal proteins with a great big

plus sign—**COMPLETE IN VITAMINS.** Yet it costs not one penny more than any good feed.

We will be glad to mail you the nearest Pratt dealer's name. They all carry other feeds well worth knowing. A splendid broiler mash that grows fat broilers quick, either in crates or semi-confinement. And a buttermilk fattening mash wonderful for preparing holiday poultry.

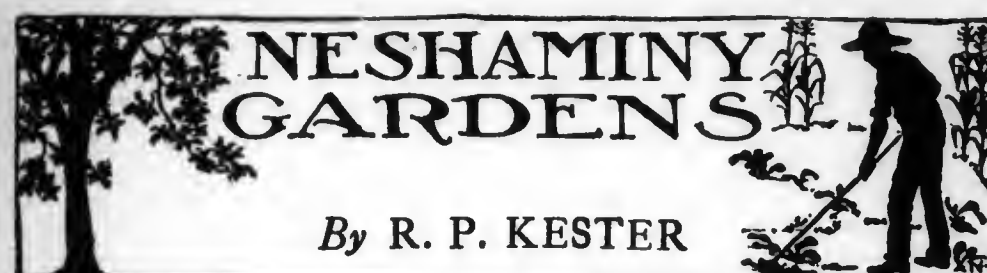
THE POULTRYMAN'S VITAMIN GUIDE—FREE

There's so much real point to knowing the vitamin story that we've prepared this guide in handy chart form for any poultryman who wants it free and postpaid. Write, Pratt Food Co., 124 Walnut St., Philadelphia, Pa., Dept. 2.

Name
Town
R. F. D. State



PRATTS Buttermilk LAYING MASH
• COMPLETE IN VITAMINS •



TWO years ago we posted our land against gunners just before the gunning season opened. A few men stopped to ask whether the signs meant what they said and, if so, whether there might be a chance of having the ban lifted in their case. No doubt many passed by after seeing the signs. But others paid no attention whatever to them. I find that other farmers have the same experience. What should we do?

The law which gives land owners or renters the right to prevent hunting was bitterly fought by city sportsmen. They feel that since game belongs to the state the farmer has no right to keep them from going any place where they may find and shoot it. It is considered selfish and unfair for a land owner to warn hunters to stay off the land. Probably the hunters would have won in their opposition had not railroad and other companies joined in the demand for a trespass law.

According to the constitution of Pennsylvania class legislation may not be passed. That is, it would not be constitutional to pass a law giving one class of land owners a trespass law while others were left without such means of protection. So the present trespass law was passed and it, of course, includes farm lands as well as other land property.

Like the saloon keepers, some hunters by their open disregard of the rights of others brought about their undoing. I have seen a half-dozen men alight from a rig and start, with their dogs, right through fields, orchards and pastures, paying no attention to anything or anybody. I have known fatal injuries to stock, and sometimes to human beings, to result from the reckless shooting of this class of thoughtless gunners. I have seen their dogs run cattle and poultry to their injury. It's no wonder farmers post their land.

The "no trespass" law gives farmers a chance to protect insectivorous birds, if they will use it. For years farmers and others have been trying to have the bob white put on the list of protected song birds. So far they have not been successful. Another bird I have in mind is the beautiful ring-necked pheasant. This bird is one of the greatest devourers of Japanese beetles we have. It is one of the natural enemies that should be protected, and the only way farmers have of protecting it is to post their lands against hunters.

I must mention the starling, also, in this connection. The starling is considered an outlaw, and in many respects he is. The only good thing I know about him is that he eats Japanese beetles. This bird is not protected in Pennsylvania, but farmers may stop the boys from shooting him just for the fun of it.

I think the new law which provides rather drastic fine or imprisonment for stealing fruit, flowers and shrubbery is having a salutary effect. At least, in our neighborhood I have not heard of any cases of this kind of malicious mischief for some time. The present law grew out of an incident happening on the fruit farm of my friend Sheldon W. Funk, of Boyertown, Pa.

What proved to be an old offender was caught red-handed picking apples from the orchard of Mr. Funk. The case was taken to court and proved. But the judge ruled that, since the apples were attached to the tree and the tree attached to the land, they were real estate and you could not

commit larceny of real estate. The case was dismissed and the prisoner freed.

But the legislature was in session, and the decision raised such a furor amongst farmers and fruit growers that the body passed the present law at once.

Are the good roads and improved schools improving the social conditions of rural communities as it was thought they would? Are "the best people" still leaving the country for the towns and cities, as was said some time ago? I would like to have a frank statement from a number of people as to what the tendency is in their respective neighborhoods. I well remember how emphatically it was asserted some years ago that good schools and hard roads would improve the personnel of rural communities.

Synthetic Jack O'Lanterns

THERE are few readers whose memories do not go back at this season to the carving in earlier days of both fierce and frivolous visages from the golden glory of the mightiest pumpkins that could be



An attractive sign, beautiful display and clean surroundings, the A, B, C of getting autoists to stop at a roadside market, are all evident in the successful stand developed by I. Kaplinsky, owner of the Covert Apple Orchards in New York. While he has 175 acres in apples and 50 acres in peaches and makes a specialty of earlot shipments, he finds that the roadside stand is a big aid in disposing of considerable fruit at a good profit. Thos. H. Wittkorn.

The Passion Play

By H. C. KNANDEL

I WAS awakened about 5:30 a. m. Sunday by the tinkle of cow bells. For the moment I wondered where I was. It seemed as though all the cows in Europe had been turned loose. Hastening to the window a sight greeted me that was most unusual. Slowly ambling down the main street of Oberammergau were scores of cows each with a bell. What a melodious sound they made. These cows knew where they belonged. It appears that a common pasture is used for them and when driven into town each cow finds its own home. Immediately following the cow episode, the streets were cleaned, flushed and made ready for the great throng that was soon to walk where the cows had walked two hours before.

With breakfast over and our tickets, cushions, opera glasses and English version of the Passion Play safely in our arms, we started for the theater. The place was packed. Near-

found in the fields. And today this primitive sculpturing is much of a rite among the lucky boys and girls of the farms.

But go into the "five-and-ten" after October is well started and behold the synthetic Jack O'Lanterns of paper pulp, pasteboard, glue, wire and orange paint. Their leering, unchanging and unalterable visages are utterly lacking in character, individualism. They are things; can be bought for a price.

Advertising and Display

How different is the real Jack O'Lantern of living juicy pumpkin flesh, so responsive to the mood of his maker, so individual in expression and dental equipment, subject even to tragedy in case of a very hard fall! My kiddies have created several and the great Halloween is not here yet. Alas, the first of these, which would have been aged several weeks, has gone the way of all flesh, the victim of insidious moulds. But a successor is to be made after school this evening.

All of which makes me wonder if in some way genuine pumpkins cannot be placed in the hands of urban children. It is a problem of distribution, not of production. Possibly advertising, connection with a system of stores, definite effort at creating one's market will be required. The children are crazy about pumpkins, at least we have found it that way on our roadside market. A little advertising plus lots of display have sold five hundred pumpkins. The largest were priced at a quarter, smaller ones in proportion. G. S. W.

character. The next day I had the opportunity of meeting two of his five daughters and received a photograph of his family. Such beautiful characters are his five daughters.

Anni Rutz as Mary and Hansi Prusinger as Mary Magdalene were the outstanding women characters. The latter is a beautiful girl in her early twenties and she fulfills in the minutest detail all that is expected of her.

The morning session ended about 11:40 and the afternoon program began at precisely 2:00 o'clock. The play was concluded at 5:40 p. m. Some have asked which scenes were the most impressive. This is difficult to state, for throughout the entire play there were scenes which could not help but affect even the most stoical person. To me, the most striking scenes were Jesus leaving his mother to go to Jerusalem; the trial before Pilate; the various meetings of the Sanhedrin; the despair of Judas; the Crucifixion and the Resurrection and Ascension.

A Touch of Nature

In the evening the various stores were open for business. Some say that the play has become commercialized. Well, perhaps, it has. On the other hand, one must remember that for nine years this small colony of people work in the fields and in their little shops preparing for the one year in ten. Days, months and even years are given over to rehearsals of the play itself. In only a few months during the tenth year can profits be realized and certainly those who attend the play desire to make purchases.

If you should have the impression that these people do not behave as most Americans, perhaps this little human incident which came to my attention will dispel that fear. It appears that some of our party stayed at the home of Mary Magdalene. On Sunday evening, after the play, they were delighted to see Hans Lang, a fine young man who played the part of John the disciple, approach the house. After some moments it was easily discovered that John had not come to make a party call or carry on a conversation with the tourists. He was particularly interested in discussing more important matters with one—Mary Magdalene. Gradually the living room emptied itself save for the two young folks who seemed to behave like respectable Americans under the same circumstances. Human nature is the same the world over.

Start Composts Now

THE ideal soil for sowing seed or transplanting young plants is loose and friable, retentive of moisture and well supplied with plant food, says C. H. Nissley of the N. J. Agricultural Extension Service. Soils for hotbeds, flats, sashhouses, or greenhouses, regardless of whether they are to be used for the sowing of seed or the growing of plants, must be prepared a season in advance. Two additional times allows a more thorough decay of manure in the soil and a better mixture of the composting material.

Manure compost is made by building the compost pile with alternate, 12 to 14-inch layers of manure and garden soil. As this compost is being made, water should be added to prevent the manure from tiring and burning. In four to six weeks this manure should be worked over and mixed. Water should again be added at this time, especially if the soil and manure is dry.

Sod may be used to take the place of manure in the compost pile. It is not readily available. Alternate layers of sod and garden loam will, after four to six months of rotting, provide an excellent medium for the sowing of seeds or the transplanting of young plants.

MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

PENNSYLVANIA FARMER
Published Weekly
Established 1877

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER
Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa.,
under the Act of March 3, 1879.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

No. 103

Pittsburgh, Pa., November 8, 1930

No. 19

The Story of the 1930 Potato Crop

By DANIEL DEAN

THE potato crop of 1930 will be harder for the grower to market than any other since war times. The crop is short, only 352,000 bushels by the estimate of October 1st, against 359,796,000 bushels for the short crop of 1929. This means less than three bushels per head of population, about the same as for the short crops of 1916, 1919 and 1925.

The shortage is the most serious in the late main crop states. These supply consumption through the fall and winter months, and from the last of March to the last of June share shipments with the new crop. Out of around 250,000 cars of potatoes shipped in each crop season only 2,000 to 5,000 cars are left to roll after June 1st of the following year. This year these states are almost 15,000 bushels short of 1929. We must also remember that the increase of population of around one and a half per cent per year means that another 150,000 bushels must be grown each year. The crop of our southern states last spring was 100,000 bushels larger than a year ago.

The best way we have to judge potato consumption from year to year is the daily reports of earlot shipments. Up to October 12th about 107,000 earlots had been shipped this season, against 108,000 a year ago. This looks like potatoes were a popular article of diet now.

Demand and Supply

The price of any commodity is a function of demand and supply. Let us first consider the supply. The large early crop of the South is gone. Cobblers and other early varieties from New Jersey across the Corn Belt, states to Iowa and Missouri are very largely gone.

The late main crop can be roughly divided into three great sections. First in the East is the Green Mountain section. This includes Long Island, the lower New England states and Maine. Practically, it also includes the Canadian maritime provinces of New Brunswick, Nova Scotia and Prince Edward Island, as short crop years imports have several times run from 6,000 to 10,000 carloads. Outside the Green Mountain, almost the only variety grown is the Cobbler, for sale as seed in the South, and for early fall shipment for table stock.

The second might be called the Rural section. Through many other varieties are grown. The White Smooth Rural is the favorite in up-state New York, in Wisconsin and in parts of Minnesota. The Smooth Rural is the most popular in Michigan, northern Ohio and in Pennsylvania. Up in the Red River Valley the growing season is so short that early varieties are grown for main crop, Early Ohio, Cobblers and Triumphs.

The third is in the Far West and differs from the other two in that its potatoes are mainly grown under irrigation. While other varieties are grown, this section has in recent years been vastly increasing its production of the Russet Burbank, often called Idaho bakers. Down in Colorado conditions favor Brown Beauty and McClure, particularly in the San Luis Valley. There in 1929 C. C. Shute grew 1,147 bushels of Brown Beauties on a measured acre for the Colorado Six Hundred Club competition. Over in California the Stockman Brothers and Fred Rindge have several times exceeded 1,000 bushels per acre of Burbanks.

The story of the 1930 crop in each might be told in a few words. The Green Mountain section had the way from just enough rainfall to so much that in Arcostook blight killed down most vines by September first. Most of the Rural section was

hit by the great drouth of 1930. The Far West section had remarkably favorable conditions. Spring planting was early, frosts nearly everywhere late, and under irrigation drouth was not a problem. Here the yield this year is 10,000,000 bushels more than in 1929. Idaho alone expects to ship 30,000 cars for the first time.

The Nixon System

What will go into history as the great drouth of 1930 cut the potato crop in the states of the Rural group and the Corn Belt states to the south of them by nearly 20,000,000 bushels below 1929, which in turn was a short crop year for this section. Later drouth spread to western New York and up into Michigan, Wisconsin, Minnesota and the Dakotas. The potato crop estimate fell on September 1st to only 339,278,000 bushels.

For a number of years the potato growers of Pennsylvania under the leadership of Dr. E. L. Nixon of the State College have been famous for growing many yields of 400 bushels of potatoes on



When Fisher Brothers, potato growers of Somerset county, Pennsylvania, spray their 75 acres of potatoes it is done with this ten-row, truck-mounted outfit in a day and a half. The disk wheels of the truck may be turned so that the concave side is out, increasing the tread several inches, and making it possible for the operator to adapt the outfit to any width rows. R. A. J.

a measured acre. The vital principle of the Nixon system is to lengthen the life of the potato plant by very thorough spraying with Bordeaux mixture. In that way fields planted in April and May are kept alive, green and healthy through the heat of summer. Then in the cool fall weather with normal rainfall they go on and often make immense yields. In short, the Pennsylvania grower may be said to grow two crops under each vine, one at the old normal time for unsprayed plants, and another in the early fall after the heat of summer is past. The system would not have worked so well had not many of the soils of southern Pennsylvania been of high quality and the farmers been keeping them in rich condition for generations. Good crop rotation, good seed and good cultural practices round out the Nixon system.

Lack of Moisture

The 1930 drouth was certainly the worst since 1901 and possibly for many years back of that. It is no discredit to Dr. Nixon or to my many friends among Pennsylvania growers that for the first time they have not come through with big yields. Late in September I was in the field of one justly famous grower. He had cultivated his last planted field in the first week of July. The ridges of soil made by the cultivator teeth lay there just as they

had been made nearly three months before. Even the marks of the tractor wheel lugs could be seen yet, there had been so little rain. Vines were still green, but were beginning to ripen, and the yield was only 100 bushels per acre against more than 300 last year.

Sometimes I wonder if some of my friends have not come to expect the impossibility of Dr. Nixon's system of spraying. It has done so well that we almost came to forget that, after all, a farm crop must have a certain supply of water if it is to give its yield. Spraying did perform marvels in the drouth sections wherever local rains fell. I saw fields in Lehigh county, Pa., only a few miles apart that yielded 350 against 100 bushels per acre. One got rains, the other did not.

Up here in New York we got much less rain than we wished for, but at that we had much more than most of southeastern Pennsylvania. Out in my own fields I started a new twelve-row tractor sprayer in July after a break-down of the old machine that had done so well for six seasons. Vines were then so immense that I had to drive slowly while a man walked ahead to help part them. On the return trip pressure ran down from 400 to 100 pounds as the tank emptied. This happened on three tanks, and then I drove right ahead and kept the pressure up all the way back. In a few weeks these spots could be seen. In all the rest of twelve sprayings the treatment was the same, and yet the loss of pressure that one time on three tanks could be told all summer. The vines died a little quicker, and the yield was a little less. All over New York, Ohio and Pennsylvania spraying has been the means by which thousands of fields have been carried through to the fall rains and good yields or at least fair yields grown where otherwise the vines would have died in the drouth before making hardly any crop at all.

What of Demand?

The drouth was broken by scattered showers in many places the last week in August. Through September rainfall was even heavy in some potato sections and good yields resulted. The October estimate showed an increase of thirteen million bushels over that of September. As killing frosts were rather late over most of the United States I look for a further advance, particularly in New York state.

So much for the supply of potatoes. What will the demand be? Frankly, I for one find it hard even to guess. Potato prices have fallen along with those of most other commodities. We know from past experience of similar business depressions that the time always comes when recovery begins. Is there a probability that a similar recovery will take place before the last of the 1930 potato crop is sold?

I cannot answer that question. It might be that the depression will even go from bad to worse, and everything else go still lower, taking potatoes down still farther. I do believe that there are reasons why potatoes may go higher than now in the middle of October. They are: First, consumption of potatoes in recent years has been about ten percent below what it was before the war, at around three and four-tenths bushels per capita against three and eight-tenths before 1917.

While the American cities had the greatest period of prosperity in the history of the world they not only had money for autos, radios, new houses and movies, but they also had the money to spend for higher priced foods. Pork loins sold well. Salt pork had less demand. (Continued on page 23.)

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
T. D. HARMAN, Vice-Pres.
GEORGE M. SLOCUM, Vice-Pres.
KEFF LANG, Manager

EDITORIAL STAFF
E. S. BAYARD, Editor-in-Chief
C. L. WHITE, Editor
MILES HORST, Field Editor
M. C. GILPIN, Editor
G. W. HARRIS, Field Editor

Editorial Office: PITTSBURGH, HARRISBURG, PHILADELPHIA
Contributing Editors: R. V. Kester, Alva Agoe, L. W. Lighty, W. D. Zinn,
R. U. Blashaw, J. F. Shigley, F. L. Bentley, J. G. Lipman,
S. W. Fletcher, H. C. Knapp, A. A. Bollen,
R. L. Scharringhausen, Gilbert S. Watts,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
(Canadian subscriptions: Fifty Cents per year extra for postage.)

RATES OF ADVERTISING
\$1.00 per agate line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for (free-stock and classified advertising. No deceptive, immoral or swindling advertisement inserted at any price.

Member Agricultural Publishers' Association,
Audit Bureau of Circulations

Volume 103, No. 19

Established 1877

CANADIAN CATTLE

LAST week a shipment of 380 Canadian range cattle left Montreal for England. This is a trial shipment and includes both fat and feeder cattle. Canadian cattlemen are looking for an outlet in Britain because of our higher tariff, but they are likely to find plenty of competition for their beef in that market.

WHY NOT A TEST?

SUNDRY organizations representing grain, cotton and other interests listen to speeches and adopt resolutions against the Agricultural Marketing Act, but they don't do anything about it. If they really believe this Act to be as they say, unconstitutional, why do they not make legal test of it? That is the way to determine the matter and the only way.

A QUARTER OF A CENT

ON the witness stand last week F. Edson White, president of Armour & Co., declared that competition does not permit any packer to fix the prices of meat. He said that if his company could get a quarter of a cent a pound more for the meat it sells it could increase its annual earnings \$9,400,000, or enough to pay regular dividends on its stock. The day on which this testimony was given Armour & Co.'s A stock sold at 4, its B stock at 2@2½, its 7 per cent preferred stock at 48 and its 5½ per cent bonds at 73½—all away below par for the lack of a quarter of a cent per pound.

A BIG MAJORITY

THE Chamber of Commerce of the United States recently sent to its members a ballot on the subject of exchange trading in agricultural products. The vote was 2,687 to 141 in favor of supporting exchange trading and 2,597 to 194 in favor of supporting future trading. On the question whether speculative trading, under proper regulation, should be supported as "a necessary factor in the economic distribution of agricultural products" the vote was 2,580 for and 199 against. Evidently business men and commercial organizations are not ready to discard our present marketing system until something better is proposed.

DIFFERENT OPINIONS

AN observer who has recently returned from Russia writes that he has no idea that the Soviet communistic plan of agricultural development will be successful, though

it may result in some good in such a redivision of land as will put it on a workable basis. There are many opinions about the great Russian experiment and we have heard more than a few of them. The character of these expressions appears to depend somewhat on whether the observer expects to go back to Russia and intends to stay away from there. This is natural but it is likewise rather confusing to those who would like to get at the truth.

NEEDS WATCHING

RECENTLY John R. London, proprietor of Beaver Creek Dairy near Troutville, Pa., was working in the shed of his barn when his aged bull attacked him, pinned him against a wall and then tossed him. The bull was proceeding to maul him further when an employe, Amos Strouse, came to the rescue. Mr. London's injuries were not serious but sufficient to confine him to his home for awhile. No doubt he would have been killed had no help arrived. Our informant does not say that this bull was gentle but probably it was so considered or its owner would not have been surprised in its enclosure. Every bull needs watching regardless of previous behavior.

WHEAT ACREAGE

ACCORDING to Nat C. Murray's estimates the area seeded to winter wheat this fall is only about four per cent less than in 1929. Favorable weather, the cheapness of seed and the need of wheat pastures are given as reasons for a lesser decline in acreage than was expected. Thus far we have found no statistician who will venture an estimate of the amount of wheat to be fed. We still think it will be large. With a shortage of corn most of those familiar with markets expected a large supply of pigs and light hogs this fall but that has not come to pass. Probably the reason is that the pigs are being made into hogs on wheat, oats and barley.

AN ILLUSTRATION

ON another page of this issue Mr. Agee presents some thoughts on taxation which deserve study, not merely because they are sound but because they may be applied by changing rather than revolutionizing our system of taxation. Let us give one example in support of one of his suggestions. A certain man owns and operates a farm. He draws a salary also. His farm pays over \$300 a year in taxes to his community. His salary, which represents a much greater income than the farm, pays nothing to that community either directly or indirectly. No doubt this is an unusual case, for most salaries do pay something indirectly, but it does illustrate the point that property bears too big a part of the public burden.

THE SACRED DOE

ON the petition of farmers and others the Board of Game Commissioners of Pennsylvania has provided for a short open season for doe deer in twenty-three counties or parts of counties. The season is the three week days immediately preceding the regular buck season. The Board provided for a total reduction of 56,024 does in the deer population of these regions, but up to October 29 only 17,504 licenses had been issued. In some cases the sportsmen are protesting against the killing of does and are denouncing the Board for permitting it, though the Board has acted only on the petition of residents and after a study of conditions. We hope that the Board will not back down in any case, for it is right in providing for reduction in the number of deer whenever and wherever they become too numerous for the welfare of agriculture and forestry. If

the Board's policy of reducing and balancing the state's deer herd is carried out farmers will suffer less loss and sportsmen will ultimately have more and better deer to kill. In our memory is correct more than twenty years ago sportsmen in these same regions protested against the protection of does just as violently as they now protest against the killing of does. They were wrong then, and they are wrong now in trying to interfere with a policy which will work out to their advantage in the end.

A BREAKFAST QUESTION

A FARMER was charged more than he thought his breakfast was worth. He didn't kick but went to the proprietor of the restaurant to ascertain the reason for the high cost of breakfasts. He was told about the rent, labor and other fixed charges and then wondered how the restaurant could sell enough meals to pay them. At this stage of his inquiry he came to see us about the exorbitant rent the food purveyor had to pay. We happened to know the facts about that building and showed him that when taxes, insurance, repairs and service were accounted for it did not pay legal rate of interest on the money invested in it. The owners thought it would increase in value, however, and probably they were correct. But nobody was much wiser after all this inquiry. The owners of the building, the restaurant keeper and his patrons were all getting what they could, their prices and patronage regulated by competition. The only thing the farmer learned or could learn was to look for reasons for things and even then he couldn't look far enough—into the taxation for instance which contributed to the overhead of all concerned.

AN OFFICIAL STUDY

THE Grain Futures Administration favors us with another "study" of the relation of future trading to grain prices. This time the subject is corn. The economist who delved into the figures available concludes that "the annual level of corn prices is determined by the size and quality of the crop, by the demand for corn and by the general level of commodity prices." This statement will be generally accepted but it doesn't satisfy the investigator, who wants to know what the futures market has to do with daily fluctuations in prices. So he digs in farther and finds that when seventeen big operators sell more than they buy the price usually goes down, and when they buy more than they sell the price usually goes up. Likewise that the larger these trades the greater the degree of concurrence with the price.

The impression which the official economist apparently desires to leave, and the inference which will be naturally though carelessly drawn from his work, is that corn price fluctuations are according to the operations of a small group of large speculators. Is not such an impression or such an inference merely a case of putting the cart before the horse? In other words, have not these competent speculators correctly interpreted the trend and bought when conditions favored an advance and sold when conditions favored a decline? Did they buy because conditions indicated an advance or did corn advance merely because they bought? Did they sell because conditions indicated a decline or did corn decline merely because they sold? Why do men buy or sell anything? It is evident that if the economist's first conclusion is correct, that the annual level of corn prices is determined by the size and quality of the crop, etc., the later impressions and inferences cannot be correct, for they imply control of daily prices, and annual prices are merely the sum of daily prices. It is unfortunate that such official studies as we have had of the grain futures market have tended to obscure rather than to reveal the truth.

OUT of the maze of informal discussions and formal addresses during the four-day marketing conference held at New Jersey College of Agriculture last week came some instructive information, while much was merely interesting. Those attending the conference returned home to face their own local marketing problems, as well as those of national agriculture; the problems had not changed, but possibly they were viewed from a better knowledge of conditions.

CHAS. B. HOWE, economist for the Federal Farm Board, and formerly connected with the College, had much to say about milk marketing conditions in New Jersey, especially in reference to the Metropolitan area. He based his conclusions on a survey made in 1928.

"The dealer-producer, who is quite a factor in the present situation, is even now passing out of the picture. His demise will be attended by a complete disappearance of raw milk, if it is not prohibited by health authorities before that time. The bulk of this market will be entirely pasteurized. The exception will be of course certified milk. . . . Consequently, I am forced to the conclusion that more consideration is being given to the raw milk situation than the facts justify. . . .

"The population of the market is increasing rapidly, whereas the production of milk within the north half of New Jersey is increasing at a much less rapid rate. A general jacking up of quality requirements and a more adequate enforcement of these will cause many farmers, particularly those having small sized herds, to withdraw from the production of fluid milk. While the large herds which remain may be able to replace this volume, it appears inevitable that New Jersey must produce a smaller and smaller proportion of the market's requirement. . . .

"The popular conclusion and one to which much service has been given, is that New Jersey producers are being crowded out of their own market. . . . There is a great hubbub about it all, and corrective measures are initiated. . . . It is the most flagrant error of an error to consider the entire production of these northern counties as lying within the exclusive milk shed of the New Jersey metropolitan market. . . .

"The scattered supply, the small volume available, the quality variation, inspection difficulties and the price competition all combine to make New Jersey an unattractive place for large dealers to buy very much milk. (Eight dealers furnish the bulk of New Jersey consumers.)" . . .

SAID E. G. Nourse, chairman of the Institute of Economics at Washington, "As far as the agriculture of the United States is concerned, our setup with world agriculture is determined by the exporting of commodities (mostly industrial products) to the markets of the world. . . . If the United States falls into that same system of disorganization as other countries, one after another, the outlook is extremely unfortunate."

Mr. Nourse in presenting the facts of the world situation in agriculture did not paint a very optimistic picture for farm relief in this country. He pointed out that it was not a political problem, but an economic problem depending on international trade relationship.

NEW JERSEY has been a pioneer in the development and expansion of farmer owned auction markets. Concerning the success of these markets W. W. Oley, chief of the New Jersey Bureau of Markets, said, "Many things are necessary for success in such (auction) markets. An active bunch of producers who can supply a steady volume in order to attract buyers is very essential. Uniformity in varieties. . . . uniformity in packaging. . . . a willingness to occasionally accept a loss. And above all a loyal group of directors. . . . Five markets (fruit and vegetables) of which we have figures this year sold a total of 571,125 packages at auction for \$828,603.32.

New Jersey Farm Comment

By G. W. HARRIS

"OUR educational work in marketing should spend fully as much time to educate the consumer as to educate the producer," was the opinion of Frank App, member of the State Farm Relief Commission.

"GRADING and standardization is to enable the seller to give the buyer what he wants, whether it be the highest or the lowest quality, the fancy grade or the culls," said Wells A. Sherman, federal marketing specialist, in his discussion of grades and standardization. " . . . some advocates assume that there is a moral question involved. . . . I recognize no such moral duty. . . . these standards are solely for the purpose of bringing about a complete meeting of mind."

LACK of standardization handicaps eastern producers in selling to chain stores and similar organizations, according to F. J. Boyce.

"One of the difficulties in getting supplies from numerous stores is that in the case of vegetables—beans and spinach, there is no uniformity of weights and styles of packages, and when it is necessary to bill out merchandise to several thousand stores, it is practically impossible, if you get supplies from five different farms with five different weights. . . . one of the greatest possibilities for improvement in New Jersey is some standardization and uniformity in weights."

"AT the present time the bulk of our business (fruit and vegetables in Bergen county) is marketed through the medium of roadside markets," said County Agent Stone.

PACIFIC COAST egg producers have made very successful inroads on New York City's prized quality market during recent years.

"Five and ten years ago the Pacific Coast producers could not place upon our eastern markets. Today they can. Today the New Jersey retail producer cannot depend entirely on quality to sell his eggs. . . . he can meet any competition on quality and size, but he can beat all outside competition with the freshness of his product," emphatically stated J. P. Vreeland, a north Jersey poultryman.

IN operating successful retail egg routes Murray Himwich, urged " . . . selection of the customer is an important factor. Choose those who understand and appreciate quality foremost, as they are glad to pay a fair price and help you build your business."

"THE year 1930," L. H. Bean, federal agricultural economist, said, "will probably rank with 1921, and other years of general business and agricultural depression when the farmers suffered more from the vagaries of foreign and domestic demands, than from the over production of farm products."

TEN New Jersey boys, vocational agricultural students and members of the Future Farmers of America, received special recognition for their farming projects and were named State Farmers during the annual three-day meeting of the New Jersey branch of the Future Farmers of America held at the College last week. Those awarded this distinctive honor were Henry Walton and Tony Darro of Moorestown High School, Howard Davis and Alexander Hill of Salem High School, Richard McDonalds of Newton High School, Sam Stellatella of New Brunswick High School, Raymond Lloyd of Cape May Court House High School, Ivan Knechel of Lambertville High School, Arthur J. Smith of Flemington High School and Abe

Berkowitz of Paterson High School.

Future Farmers of America, an organization of vocational agricultural students, has become nation wide and is growing in strength and importance rapidly in most of the states. It was founded several years ago with its purpose to develop rural leadership, to strengthen the confidence of the farm boy in himself and his work, to encourage cooperative effort. . . . to promote thrift, to promote scholarship. . . . Those boys who had attained these things to a marked degree were awarded State Farmer keys.

ABE BERKOWITZ, a city boy living in Paterson, felt the call of country life. For the past three seasons he has worked as a hired hand on farms near Paterson to gain farm experience. It is especially pleasing to find a student from the city taking an active interest in farming.

THE farm projects of Arthur Smith of Flemington during his second and third years in school were awarded first prize as being the best in the school and the most profitable.

HOWARD DAVIS from Salem is president of the State Future Farmer Chapter and during the past three years has been a member of the stock judging team. Like all State Farmers his savings and investments from his farm projects are over \$500.

THE labor income from the projects of Alexander Hill of Salem is \$1.63 per hour. In 1929 he was a member of the New Jersey state dairy cattle judging team that went to the National Dairy Show at St. Louis. This fall his hogs exhibited at the Trenton Fair won a grand championship and a first and a second prize ribbon.

SAMUEL STELLATELLA, New Brunswick, lives in town, but plans to enter farming as a life work as evidenced by the fact that he elected the agriculture course in high school, that he worked on the state horticultural farm for three summers before entering high school, and that he has been employed as a farm workman by the agronomy department of the College of Agriculture.

DURING the past three seasons, Tony Darro, Moorestown High School, has worked with his father. The past season he sold at retail practically all of the produce of the farm and has \$1,401 invested in farming and savings. He was a delegate to the State Future Farmer meeting in 1929 and is now treasurer of the state chapter.

THE farm profits of Richard McDonalds, Newton, for the past two years, made by growing and marketing poultry and sweet corn, and his savings and investments equal \$1,175.31. He is treasurer of the Young Farmers' Cooperative Association of the Newton High School.

IVAN KNECHEL, Lambertville High School, has worked on the home farm, has learned to cooperate by buying feed and poultry supplies cooperatively and by working with the other members of his agriculture class in several group projects. He is a member of the executive committee of the New Jersey State Branch of the Future Farmers of America.

HENRY WALTON, Moorestown High, has grown lima beans and tomatoes as his school projects in farming and during the past two seasons the past summer he acted as farm foreman of the entire farm in addition to the work on his project.

THE farming of Raymond Lloyd, Cape May Court House, is largely with truck crops, but in addition he keeps a few chickens, a pig and a cow as side lines. He is assistant steward of his local Grange, has represented his school for two years on the state judging teams, and is secretary of his local Future Farmers of America Chapter.



Future Farmers met at New Brunswick last week. New Brunswick high school carried off highest honors in judging and identification contests, with Newton second and Freehold third. Sixteen vocational schools were represented by 180 students.

A 9,000-Acre Farm in Germany

By J. W. WHITE

I SHALL not forget the enthusiasm of the load of American college professors as we drove that morning into the immense quadrangular barnyard of the Schurig Farm. We all seemed to realize that this day would mark the climax of our trip through Western Europe. Our party included fourteen representatives from eleven American agricultural experiment stations, traveling as the guests of the Deutsches Kalisyndikat and Associated Companies.

We were over there to study European agriculture and gain first-hand information concerning the results of research studies as conducted by soil scientists of the six countries visited. Our travels up to the time of the visit at Dr. Schurig's farm at Markee, Germany, had led us often along the unbeaten path to the small peasant farms of Holland, Belgium, France and Switzerland. Of all the many farms visited that of Dr. Schurig, for many reasons, stands out in my mind as the most remarkable. There it seemed to me that art and science, theory and practice of agriculture went hand in hand and there was no conflict between them. Not only were we impressed with the extensive acreage under the management of one man, and the unusual high crop yields, but here we learned first hand the true meaning of German efficiency and it is not a myth, I assure you.

Unlike the humble peasant farms of a few acres where most of the labor is done by hand, we found this farm well equipped with modern machinery, much of it American made, some of it unfamiliar to us. Under a nearby shed we inspected immense press drills, used for seeding small grain, peas and beets. The drills were four meters (13 feet) wide to which were attached fourteen hoes ten inches apart. Nearby were cultivators and harrows of the same width, designed to cultivate the drilled crops. Four large tractors with complements of machinery were being put into readiness to enter the field, immediately following a harvested crop of peas and carrots. For we soon learned that no time is wasted here. Large threshing machines, or separators, provided with revolving cylinders, especially designed for threshing green peas, attracted much attention, for here was something new to most of us. The farm was well equipped with various other kinds of farm machinery common to all big farms. Just outside the immense barnyard stood several cars on narrow gauge tracks.

"What are those?" we asked our genial host. "Why," he said, "I forget to tell you that we have fifteen miles of narrow gauge track running over the farm and those are some of the cars used for hauling in the crops."



Brood sow houses made of baled straw are warm, dry and sanitary.

This was not a stock farm. Just enough horses and work oxen for extra labor and cows, chickens and other fowls for farm use are kept. However, two thousand hogs are raised each year.

The 9,000 acres of land is low and level, the water table being only a few feet from the surface. This is fortunate, for this section of Germany gets only about 22 inches of rainfall, one-half that of our eastern states. The soil we found ranged from a fine sandy loam to loam.

There appeared to be no definite crop rotation. The crops grown have been found to be best adapted to the soil and climatic conditions and those that command the best market prices. The summary on page 16 shows the acreage of the various crops and also the yields.

When we realize the low rainfall and open soil of a sandy nature it doesn't sound like the right conditions for wheat, but yields are 66 bushels per acre. These results are secured without the use of animal manure.



"No Man's Land"—Women laborers digging carrots in the 400-acre field which yields 50,000 pounds of roots per acre. Approximately 600 women are employed on this farm during the harvest season.

How does this German farm manager treat his soil, and what manner of man is he? He is thoroughly sold on the idea of liberal use of commercial fertilizers and is wise enough to know that it pays. He knows that the bigger the yields per acre the less the labor cost per unit.

Rye, oats and barley were formerly grown here. We understood that extensive and also intensive vegetable production pays better. The former yields per acre were as follows: Rye, 50 bushels; barley, 62 bushels, and oats 80 to 100 bushels.

The nature and amounts of commercial fertilizer that are used for general crops were found to be as follows: Annual rate per acre—Ammonium salts, 400 pounds; muriate of potash, 400 pounds; superphosphate (basic slag), 400 pounds.

The ammonium salts consists largely of ammonium sulphate and the phosphate fertilizers are applied as basic slag. This rate of 1,200 pounds per acre, of course, seems excessive to those engaged in grain farming, but we must remember that of the 6,575 acres that we saw in crops, exclusive of meadows and pasture, 4,250 acres were in vegetable and root crops. This farm is primarily devoted, therefore, to a system of farming involving quick growing plants which require abundance of readily available plant food.

In addition to the commercial fertilizer, a fine divided chalk (limestone) is applied every three years at the rate of 1,200 pounds per acre. The old German saying, "Kalk macht Vater reich aber die Söhne Arm," (Lime makes the father rich, but the son poor) does not seem to be true, for we must remember that on this farm as well as the farmland throughout Europe, agriculture has been in practice for many centuries and it is needless to say that this soil is still very fertile. However, the old saying, "Lime and lime without manure (or commercial fertilizers) make both farm and farmer poor" is entirely true.

Dr. Schurig made a wager that we could find any weeds on the 9,000-acre farm. Here where he slipped up. After diligent search pointed out to him actually nine weeds growing in a truck patch. He immediately sent three women out to remove these and search for more they had overlooked. He then apologized for his inefficient labor and stated that he was too poor to grow weeds.

In Europe perennial ryegrass corresponds to our Kentucky bluegrass and also timothy. The old pastures, and we expected some in England over 400 years old, are largely composed of grass mixed with white clover—not white Dutch clover but a variety of white clover which over there is much superior to our variety.

Schurig gave us the following figures representing the annual rate per acre of fertilizers used: 800 pounds of mixed fertilizer salts containing superphosphate (basic slag), muriate of potash and sulphate of ammonia. This mixture is divided into four applications put on during the growing season. In addition to this treatment the hog manure is returned to his meadow and pastures.

On this farm the meadow is cut three times a year, which gives a hay richer in protein than which is allowed to grow to maturity. As an example, young immature bluegrass contains per ton of dry matter 310 pounds digestible crude protein compared to only 87 pounds per ton for bluegrass cut after bloom. Timothy before bloom contains 148 pounds digestible crude protein per ton of dry matter while timothy hay in seed contains only 64 pounds.

Winter wheat is raised on this farm, seeded October and harvested late in July. In the system of vegetable fertilization there occurs, due to intensive cultivation, the breaking down of considerable soil organic matter which liberates an excess of soil nitrogen. This residual nitrogen, will say following a late cabbage crop, together with the liberal application of commercial fertilizers already mentioned, may account for the large yields of 66 bushels of wheat per acre. The field of wheat we inspected represented a perfect state with no lodging. The wheat is seeded in rows 18 inches apart by a thirteen-foot drill to which attached fourteen hoes. The wheat, we were surprised to learn, is cultivated until it reaches height of one foot.

The potato crop of 1,780 acres is next in importance and as you remember gives an average yield of 433 bushels per acre. (Cont'd on page 16)



Cars used for hauling the crops to the barns. Fifteen miles of narrow gauge tracks extend over the 9,000-acre farm.

John Imberlay, Trustee

By Homer Green

Copyright, 1906, by Perry Mason Company, Boston, Mass.

SYNOPSIS

There is a deep mystery about the trust under which John Imberlay, president of the Citizens Bank of Briery, is acting as trustee. The creation and conditions of the trust and the beneficiaries are matters of which Mr. Imberlay alone appears to have any knowledge. Mrs. Leighton, a widow, and her lame son, Robert, have just left Mr. Imberlay's office after an unsuccessful plea to have an extension of time on the long overdue mortgage on the farm. Mr. Imberlay has flatly refused their request but later seems interested in Robert and also in Rafe Orchard's neighboring farm and makes inquiries concerning both farms. Robert and his mother have tried without success to borrow money to save their home and in a spirit of fun, Robert even suggests borrowing from Rafe Orchard, who is as poor as the Leightons.

maple-bordered highway, village roofs and wooded hillsides, to the faint blue line of the far-off mountain range.

When she finally descended the hill she came directly to the house and entered it by the rear door.

Quiet reigned for so long a time that Robert, growing anxious about her, left his seat on the front porch, and went in through the hall to look for her. He did not go far, however, for through a half-opened door he saw her, kneeling by the side of the bed in her own room, and he turned away without disturbing her. When at last she came out to him her face was peaceful, her manner was composed, and there were no traces of tears about her eyes. She resumed her seat in the little rocking-chair that she always used as her own.

"Now, Robert," she said, "I am ready." "Very well, mother."

His heart was beating very fast as he unfolded the letter and held it up before him, and his breath came so quick that he could hardly control his voice. Nevertheless he began to read:

"Briery, Pa., June 28, 1884.

"Robert C. Leighton.

"Dear Sir: Owing to the resignation of our receiving teller, and the consequent promotion of

The Cheerful Plowman



TACKLING THE JOB

A FELLOW must, I think, at times fight off his fears and null their crimes. He must pitch in and do the task that circumstances seem to ask. For instance, in my many years I've never chummed with auctioneers. I've listened to their squawking cry with much discomfort in my eye. I plugged raw cotton in my ears to shield me from their rasping gears. But just the other day, I vow, I had to cry a sale somehow!

It seems the so-called auctioneer who should have come did not appear, and there was all that kind of stuff strewn on the yard, all in the rough. The owner he was in a fit, what would he, could he do with it? No auctioneer, and there his plows and all his horses and his cows were standing ready to be sold—his heart grew heavy, weak, and cold.

Nobody chirped, though scores of men from Pocksville to Crowder's Den had gathered there to bid and buy. Said I, "Old top, I vow I'll try to sell this stuff you've gathered here. I'll try my hand as auctioneer!" The look of gratitude, I swear, that swathed his face from chin to hair gave courage to my shaking knee and put new energy in me.

I grabbed the hammer with a rush and started in to yell and gush. "What am I offered," I bellowed, "for this smooth working, supple Ford? Ten dollars? Yes? Eleven? More? Twelve-fifty? Twenty? Twenty-four? Come on, bid up, that is no price for such a Ford, so trim and nice. One hundred! That's the stuff! What's that? One hundred fifty dollars flat! One hundred fifty—once! Ah me! One hundred fifty—twice! Oh see! One hundred fifty! SOLD! It goes to that gent with the flattened nose."

And so we wiggled down the line, the bidding all the way was fine, the stuff brought more than it was worth. The seller thought he owned the earth. "How did you do it? Bless your heart?" he said to me with jaws apart. "It was a time," said I, "you see, when duty squelched all fear in me, when circumstances seemed to say, 'It's up to you, old top, today!'"

J. E. T.

others of our force, a vacancy exists in one of our clerkships. I have satisfied myself by appropriate inquiries concerning your character and ability. This morning I laid the matter before our board of directors, and they authorized me to offer you the vacant position at a salary of thirty-five dollars per month. You will be in line of promotion, and your salary will be subject to increase as your record at the bank may warrant. As we desire to have the vacancy filled at the earliest possible moment, an immediate reply will greatly oblige me.

"Concerning the mortgage held by me, as trustee against the George R. Leighton estate, I have decided, after careful consideration, to yield to the request of your mother and yourself, and grant an extension of time. I shall be glad, however, to receive instalments of the interest now due as rapidly as you may find it possible to pay them.

"Truly yours,

"John Imberlay.

For a full half-minute Robert and his mother looked at each other without speaking. The letter had fallen into his lap, and she was sitting bolt upright, grasping the arms of her rocker with both hands. Then she cried, "Robert!"

"Mother, what does it mean? I don't—I don't quite understand it!"

"Why, Robert, it means—it means—I don't understand it, either."

"Let me read it again." He read the letter the second time, slowly, carefully, stopping to give emphasis to important words.

"Yes," he said, "it's all there. He offers me a position in the bank, and he gives us time to pay the mortgage. What does he mean by it, mother? Why does he do that for us?"

"God prompted him," she said, reverently. "Isn't it beautiful?" She rose to her feet. Her eyes were already filled with tears. "I've got to go and cry a little over it, Robert. It's so sudden. I wasn't expecting it. I can't—I don't—I'll be back in a minute, Robert."

And woman like, she went into the house that she might indulge, unseen, in the fit of weeping which alone would bring calmness to her heart. Ten minutes earlier, when she felt that the blow was about to fall, she had awaited it with dry eyes. Now that a blessing had come instead, she found her only relief in tears.

As for Robert, he seized his cane and began walking hurriedly up and down the porch. His mind in a tumult. A new vista had suddenly opened before him, a life of which he had never dreamed, a future filled with great possibilities and golden opportunities. He tried to check his enthusiasm concerning it; to be reasonable, to be conservative, as was his nature; to think seriously over the proposition that confronted him. He struggled with it for ten minutes, and then he felt that he must have his mother's help. He went to the door and called:

"MOTHER, aren't you almost through crying? I want to talk with you."

From somewhere inside came a broken voice:

"Yes, Robert. Just a—just a minute."

When she did come out, a few minutes later, no one could doubt that she had been weeping. Nor could any one doubt that she was happy, for happiness shone in her tear-washed countenance. "O Robert," she said, "we're to save the place—and you're to have a splendid position!"

"Yes, mother. I believe we'll save the place now, and that's glorious news, to be sure; and it's all right to cry over it, or to laugh, either, for that matter. But about the position, that's a serious question, and it's one that must be answered promptly."

"Why, Robert, I suppose you'll accept the offer, won't you?"

"Well, now, let's see. It won't do to be too hasty, you know. Let's consider it. In the first place, there's steady employment. I could teach school only eight or nine months in a year at the best. In the second place, the salary is thirty-five dollars a month. I couldn't get more than thirty teaching school, at least for some years. Then there's the prospect of promotion with increased salary. And it's a position with which my—my lameness wouldn't interfere. How does it strike you, mother?"

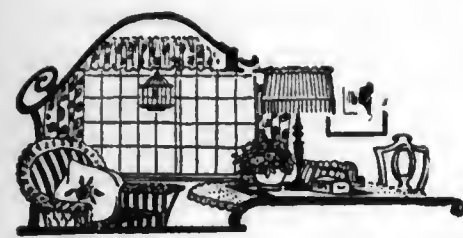
"Why, I think it's a glorious opportunity."

"Very well. Now let's look at the other side of it. I shall have to live at Briery and you'll be here alone on the farm with Dick."

"That's true. I hadn't thought of that."

Her ardor was checked at once. Not to have Robert at home meant very much to her. But with her woman's bravery she would not let her own comfort interfere with Robert's welfare. She rose in a moment to meet the situation.

(To be continued.)



The Farm Home



Hot Lunch in Country School

By GERTRUDE S. STEWART

THE story goes that a certain child once said: "Pa warms the milk for the little calf, Ma heats the food for chicks; they eat a hot dinner at noontime, too; but my lunch is as cold as bricks." One woman in a brisk community, after hearing the above, decided to try for hot lunches in their school. All her good neighbors (women) favored the plan, and they asked the men for help. But the men saw no necessity for such foolishness.

There was not so very much in the plan as outlined for the men to do, but it was so comfortable by the radio and fire that they simply could not be bothered. Then one clever woman had an idea—and it worked. She suggested that the women all combine to feed the dear husbands at noon with a packed lunch just exactly like the children were carrying.

With one accord, those women stood together fearlessly and before the appointed week had gone by, the hot school lunch was in working order. "In union there is strength."

How About the Children?

The furnishings were not elaborate nor expensive. Two cupboards were made out of mere orange crates. Two more such crates made a substantial bench on which to stand the oil burner. An old abandoned ironing board was hinged to the wall, given two legs for extension, and it formed an excellent work table which could easily be put out of the way.

With a few donations of money, the cooking equipment was bought. Those in charge were careful to buy cheerful, colorful pans and kettles needed for soup and cocoa, and the usual dish washing. It was all quickly and easily done when once agitated.

Is there after all any work that the Parent-Teacher Association or Women's Club of your vicinity might tackle to bring forth better results? We are constantly studying better methods of feeding our cows, our chickens and our pigs. If our little folks are eating cold lunches these frosty days, isn't it high time we were giving them a bit of attention?

And the Boys, Too

I have been in country schools where delicious hot foods were possible with almost no expense. One resourceful teacher planned this interesting hot complement to her brood's carried lunch. Monday—baked potatoes; Tuesday—baked beans; Wednesday—escaloped cabbage; Thursday—baked macaroni with cheese; Friday—baked apples stuffed with raisins and hot cocoa every day.

You note these foods are oven varieties—yet there was no oven. It so happened that the heating stove had a very wide sill in its mouth. Here the cooking took place. Each child carried a potato every Monday. At recess several girls placed them in the improvised oven. The mid-week meals were furnished at very trifling cost, with each child bringing his own apple on Friday. And how those youngsters loved the noon hour! The boys were anxious to help with preparation, too, and occasionally were given the chance. On holidays or special days of any sort, there was a surprise menu which only teacher and the committee knew about.

The cocoa was made on top of the big stove. Cocoa syrup was made for a week's supply. This school had twenty-three children of all ages and grades. A nearby farmer furnished the tested milk, and every parent rejoiced at the better health enjoyed by their youngsters, and the improved report cards which were a very noticeable result.

Hot school lunches are possible in every school. Have you that benefit in yours? If not, get busy. Our state extension workers will help overcome any difficulties that may arise. Farmers' Bulletin

No. 712 might also be found useful. That is yours for the asking. Write to U. S. Department of Agriculture, Washington, D. C.

Problem Solved

HERE is the way the Teachers' and the Mothers' Club of Nether-Providence Consolidated School in Delaware county, Pennsylvania, solved their problem of a hot lunch for each of their four hundred pupils.

They had thirty dollars in their treasury, and a dismal basement.

Seven girls in the Home Economics Class whitewashed the walls a light green and the ceiling a soft cream. They painted the tables, benches, and all woodwork in harmonizing colors.

The art teacher and an eleventh grade boy painted a Spanish mural on the walls. The crude-looking white marble drinking fountain was transformed by placing a piece of beaver board back of it and decorating it in tiled effect.

Awnings, curtains, window boxes and an artistic sign were supplied out of the thirty dollars. An oil stove was loaned for the cooking.

The president of the Club supervises the operation of the cafeteria free and the sales pay the wages of a cook and dishwasher. One substantial hot dish, such as meat loaf or spaghetti, a hot drink, and always milk, fruit and buttered rolls, are served.

They are so pleased with the results that when



How I do enjoy my cold milk or hot cocoa and I never ate better hot soup!

Schools Promote Patriotism

IN the alley there was daily strife. Seven or eight nationalities were, trying to live together without having learned how. Silent contempt and suspicion changed often to noisy beratings, for they could no more comprehend each other's view-points than they could pronounce each other's names.

Now there was a kindergarten in this alley. Every morning the large, cheerful room was crowded with the little sons and daughters of this heterogeneous population, but here discord was reduced to a minimum. The children played and sang together like one happy family. They smiled gratefully at one another. They helped each other in their little tasks, showing genuine sympathy when one met with a difficulty. They learned each other's names, too. It was really hard to be cross. To begin with, Miss Roberts didn't like it. Then there were so many lovely flowers, and the little goldfishes were so beautiful as they scudded about in the sparkling water. Best of all there were so many wonderful things to do.

And were all the little children of the alley here? Alas, no. Had the parents objected to sending them or didn't the children want to go? Most of the parents wanted very much to send them and some of the children cried to go, but—there wasn't room. In the United States only one child in seven has the chance of a kindergarten.—Nat'l Kindergarten Ass'n.

Lights Are Important

AS evenings grow longer and days shorter, the lights in the home become increasingly important. Comfort and convenience demand that lights be arranged to suit the needs of different members of the family. When Father sits down to read in the evening he needs a clear, mellow-shaded light shining over his left shoulder on his book. A floor lamp beside his chair should have a wide shade of some soft yellow or buff color to prevent glare and give a cheerful glow. An opaque bulb will protect his eyes.

When Mother is in the kitchen she can work with twice the comfort and efficiency if wall lights are arranged which throw light on the sink, work table and stove. If the light consists of one bulb hanging at the end of a cord from the middle of the ceiling she must always work in her own shadow. When the kitchen has only one central light this should be enclosed in a globe at the ceiling and the bulb should be powerful enough to give adequate light over the entire room. Cream, yellow or buff walls will help by reflecting the light thrown on them.

The children who study or read in the evening need strong but shaded lights. A lamp on the study table should be low and have a shade to keep the light out of their eyes and to reflect strongly on their work.



My lunch room is horrid and my lunch is as cold as bricks.

they build again a proper cafeteria will be provided. Mrs. W. E. Hebel.

Some of the best playthings for the young child are lock blocks made of smooth wood cut in the form of engines and cars and so shaped that they lock into each other and may be pulled around the floor.

Fresh stains of cod-liver oil may be removed easily by applying carbon tetrachloride and washing the garment in warm soapsuds.

A pleasantly tart thick salad-dressing is made of equal parts of French dressing and sour cream.

The long-handled dust-pan prevents tired backs.



And a Wardrobe for Dolly, Too

7005—Ladies' dress. Cut in five sizes: 36, 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 38-inch size requires 5 yards 39 inches wide. For contrasting material $\frac{1}{2}$ yard will be required. Price 15c or two for 25c.

7006—Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size requires $\frac{3}{4}$ yards of 39-inch material. For contrasting material $\frac{1}{2}$ yard is required. Price 15c or two for 25c.

7007—Girls' dress. Cut in five sizes: 10, 12, 14 and 16 years. A 14-year size requires $\frac{3}{4}$ yards of 39-inch material. With long sleeves the material will be 1 yard less. Price 15c or two for 25c.

7008—Ladies' morning frock. Cut in five sizes: 36, 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 46-inch size requires $\frac{3}{4}$ yards of 39-inch material. For contrasting material $\frac{1}{2}$ yard is required. Cut cross-grain. Price 15c or two for 25c.

7009—Ladies' and misses' lounging dress. Cut in six sizes: 16, 18 and 20 years and 40, 44 and 48 inches for 18-year size in full length requires 3 yards 39 inches wide. For the short length $\frac{3}{4}$ yards will be required. Price 15c or two for 25c.

7010—Boys' suit. Cut in four sizes: 4 and 5 years. A 4-year size of one piece requires $\frac{3}{4}$ yards of 40-inch ma-

terial. The trousers of contrasting material requires 1 yard of 40 inches wide. The waist $\frac{1}{2}$ yard. Price 15c or two for 25c.

7011—Girls' dress. Cut in four sizes: 2, 4, 6 and 8 years. A 6-year size with long sleeves will require $\frac{1}{2}$ yards of 39-inch material. If made with short sleeves, $\frac{1}{2}$ yards will be required. Price 15c or two for 25c.

7012—Girls' dress. Cut in five sizes: 1, 2, 3, 4 and 5 years. To make dress without sleeves and with ruffles requires $\frac{3}{4}$ yards of 39-inch material for a 4-year size. With long sleeves and neck ruffles $\frac{1}{2}$ yards. Price 15c or two for 25c.

7013—Child's rompers. Cut in three sizes: 6 months, 1 and 2 years. A 1-year size requires $\frac{1}{2}$ yards of material 36 inches wide together with $\frac{1}{4}$ yard of contrasting material. Price 15c or two for 25c.

7014—Doll's coat and beret. Cut in five sizes for dolls: 12, 16 and 20 inches in length. To make coat and beret for a 16-inch doll will require $\frac{1}{4}$ yard 35 inches wide. Price 15c or two for 25c.

7015—A new doll and garment outfit. Cut in three sizes for dolls: 12, 16 and 20 inches in length. To make the doll in a 16-inch size requires $\frac{1}{2}$ yard of 36-inch material. The dress and cap require $\frac{1}{4}$ yard. The cap alone requires $\frac{1}{4}$ yard. Price 15c or two for 25c.

HOW TO ORDER

Write plainly, giving pattern number and size. Address: Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

TWO HELPERS INSTEAD OF ONE IN EVERY BAR

NOTHING EQUALS FELS-NAPTHA FOR WASHING WORK CLOTHES

WORK CLOTHES are particularly hard to wash because they get so dirty.

But in Fels-Naptha, you get an added dirt-loosener—two washing helpers instead of one. You get soap, of course—good golden soap. And in addition, you get naphtha, which is a marvelous dissolver of grease. So with soap and naphtha working together, grime hasn't a chance. Even stubborn ground-in dirt lets go. Clothes come out bright and clean without hard rubbing.

Fels-Naptha gives this extra help for work clothes and the whole family wash. Try it! In tub or machine; for soaking or boiling; in hot, lukewarm or even cool water, it works splendidly. Try it for your household cleaning, too. See how quickly it cleans woodwork, milk cans, separators, incubator trays. See how gentle it is to hands. That's

because Fels-Naptha loosens dirt quickly and you have them in water less time.

Ask your grocer for Fels-Naptha—it's the best kind of washday thrift. It brings you not more bars, but more help. Extra help that saves YOU!

SPECIAL OFFER—We'll be glad to send every user of laundry soap a Fels-Naptha Chipper. Many women who chip Fels-Naptha into their washing machines, tubs or basins find this chipper handier than a knife. Use it and Fels-Naptha to make fresh, golden soap chips (that contain plenty of naphtha!) just as you need them. Send only a two-cent stamp to help cover postage, and we'll mail you this chipper without further cost. Write today. Dept. 7-11-8, Fels & Company, Philadelphia, Pa.

THE GOLDEN BAR WITH THE CLEAN NAPHTHA ODOR

FELS-NAPHTHA

DAMP, CHILLY WEATHER
keep it away from
your kids
COLDPROOF
KNIT SLIPS

Damp, chilly days of Fall. Cold bitter days of Winter. Sore throat, colds . . . Days lost at school.

Your children need the protection of Indera Figurit Knit Slips.

Indera protects by keeping warmth in and the cold out.

EXCLUSIVE FEATURES

Indera has a patented border that prevents bunching between the knees and riding up around the hips. And STA-UP shoulder straps that stay where they belong.

No buttons to come off. No ironing necessary.

</

New Jersey Poultry Convention

By R. L. SCHARRING-HAUSEN

THE annual convention of the New Jersey State Poultry Association, held at Asbury Park late in October, was favored by ideal fall weather, which brought out a good attendance of poultrymen to inspect the show and listen to the program of speeches. The poultry show was larger than last year, with about a thousand birds on exhibition, an egg show, and a considerable commercial display.

The program of addresses, always interesting, was opened by John W. Goodman, supervisor of contests in New Jersey, who spoke on "Using the Contest Birds." He summarized the value of the egg-laying contests as threefold. First, it is possible through the trapnest records to pick out the heavy laying birds to be used as breeders; second, through the use of the point system, adopted this year, a picture of pen production is gained, not merely on number of eggs, but also on size of eggs, which is vastly important to any one selling on a graded market; and third, the official records obtained at such a contest put the results before the interested public.

Hampered by Disease

The next speaker was Mr. L. M. Black, who spoke on "New Jersey as a Poultry Producing State." Mr. Black pointed out that New Jersey is primarily a producer of white eggs for consumption rather than storage, and because of its favorable location in regard to markets, not only has no serious marketing problem, but that poultrymen there receive such good prices for their high quality fresh eggs that a dozen eggs will buy more pounds of grain for them than in less favorably situated states. This was forcibly brought out in conversation with several persons attending the meetings. A man from Kansas told me that eggs out there were bringing 27c, while a poultryman from North Jersey reported getting 67c at his door!

Mr. Black brought out the problems that confront the New Jersey producer: better production is needed, mortality is too high in the laying flock, and the economical production of the yearly crop of pullets is greatly hampered by the diseases and parasites which accompany intensive poultry keeping.

Look to Health and Quality

Dr. F. R. Beaudette told of his experiences in Europe during the past summer, when, in his capacity as poultry pathologist he visited the principal veterinary colleges there. He stated that, judging from his observations made on the tour, the study of poultry diseases is much more advanced in America than abroad.

Continuing along the line of poultry diseases, Dr. C. E. Hudson told of observations gained in his position as assistant poultry pathologist. He related a number of cases in which diseases or parasites had been introduced into clean flocks through the purchase of infected chicks or adult stock, and warned his audience to look to the health of the flocks from which they purchased live birds of any age as well as to the quality obtained.

Next on the program was the prominent fancier and poultry judge, Mr. M. L. Chapman, who spoke on "The Value of Exhibition Qualities in Fowls." Mr. Chapman pointed out that breeding high-class show birds is profitable, and predicted a return of interest to backyard poultry keeping, which has waned in the past ten years, stating that the demand for exhibition fowl is bound to increase.

The last address of the day was given by Dr. C. W. Russell, of the Department of Biochemistry at New Brunswick. Dr. Russell described the results of laboratory experiments on

the utilization of calcium by the fowl, which are being made as a foundation for later work in the study of bone and shell formation and hatchability rather than for any immediate information for the practical poultry raiser.

The opening speech of the second day of the meeting was made by Prof. W. C. Thompson, who gave us "New Ideas from the World's Poultry Congress." Prof. Thompson, who was in Europe last summer, stated that poultry meat production, rather than egg production, is of primary importance there, and described crate fattening and cramping devices in use abroad, and also an automatic plucking machine which removed the feathers from a bird much more rapidly than it could be done by hand.

Need to Advertise

Prof. Thompson also mentioned the necessity for breeding for quality of production, and made the interesting statement that from a study of the records of contest birds, there was apparently no relation between egg size and number of eggs, which dispels of the idea commonly held that a bird which lays a large number of eggs necessarily lays small ones. Evidently she may or may not; the two factors are not related.

Harry R. Lewis, president of the National Poultry Council, who had just returned from a conference at Washington, spoke on the "National Outlook on Poultry Affairs." It is the opinion of Mr. Lewis that poultry conditions have touched bottom, and in the East at least are bound to improve. The present unsatisfactory condition facing poultrymen can be blamed on the rapid expansion of the industry during the past ten years, complicated by the competition of other food products with eggs and poultry meat, and made worse by a sort of consumers' strike which perhaps is the result of the general industrial depression.

Mr. Lewis believes that an educational advertising campaign would help create a demand for poultry products, and move surpluses of meat and eggs. He looks for better prices in 1931, especially on the Atlantic Coast, and predicts that high quality eggs and poultry meat will find the markets ready.

The morning meeting was brought to a close by a round-table discussion of various rearing methods practiced by prominent poultrymen throughout the state. Mr. Charles Cane, a well-known producer of pullets, described his method of rearing chicks in colony houses on range. He was followed by Mr. James Whetsel of Vineland, who related his experiences in raising some 20,000 chicks in batteries this season. Mr. Whetsel starts his chicks in batteries, but moves them out in two or three weeks to brooder houses. Next Mr. Fred Yahn described his method of starting chicks in batteries, transferring them to wire-floored brooder houses, and then to range.

Discuss Marketing Methods

In the interesting discussion of this topic, it was brought out that each system has its merits and drawbacks, and that individual conditions determine which it is best to use.

The afternoon of the second day was given up to various business meetings, followed by a banquet in the evening.

The final meeting of the convention, held the following morning, was addressed by Dr. J. H. McNeil, State Veterinarian, on "Poultry Disease Control in New Jersey." Among other phases of this work, Dr. McNeil's department has control of the blood testing work in connection with B. W. D. eradication.

The concluding number was a discussion of marketing methods, in which it was brought out that the



Whether it is a dairy feed or a mash, for hogs or horses, Arcady Wonder Feeds are the finest you can buy—mixed by special formulas to give your stock and poultry the maximum in feeding. Your dealer carries Arcady Wonder Feeds. See him today or write us direct.

ARCADY FARMS MILLING COMPANY
Dept. 32 Brooks Building, Chicago, Ill.



Send 'em to FOX and Get 5% MORE

"Boys—get wise to this." George I. Fox pays 5% more for anyone else for furs on shipments of \$50 and up. If the top market price for your pelts is \$50—For your check for \$50.00. If it's \$100—the check reads \$105.00. Fox can afford to give you a 5% bonus. It's the logic of the receiver of raw furs in the East—has a tremendous outlet for furs of all kinds.

And he pays the day shipments are received—without deducting a penny for commission, handling, shipping. Get that extra 5% bonus this season. Start now—send coupon for Fox's autumn price list, shipping rates, and furs hand book. All FREE.

MR. GEORGE I. FOX, (Personal)
236 W. 30th St., New York

Send me FREE items mentioned above. I want to make more for money this year.

Name.....
Address.....

Starts Hens Laying

Here's a New Way to Get Eggs in Winter—Costs Nothing to Try

Rev. R. V. Andrews, Eckerty, Ind., has a real idea for chicken raisers who are not getting plenty of eggs. He says:

"I notice in the paper where a lady gave Don Sung to 26 hens and got 26 eggs a day in winter. I can beat that. My 26 hens, after laying 26 eggs, laid 20 to 24 eggs, day after day. The hens were in fine health and kept laying all winter."

Don Sung, the Chinese brand of pullets which Mr. Andrews used, are opening the eyes of chicken raisers all over America. These pullets can be obtained from Russell-Hunter Co., 1001 Station Bldg., Indianapolis, Ind. Poultry raisers whose hens are not laying well should send 50 cents for a trial package. Get 25 for the extra large size, holding 3 times as much. Don Sung is positively guaranteed to do the work or money refunded, so it costs nothing to try. Now is the time to start giving Don Sung to your hens, so you will have a good supply of fresh eggs all winter.

ULSH'S Superior Chickens
White Wyandottes, White Rocks and Barred Rocks. Write for Fall & Winter prices. Hatching records. The year round supply. Delivery guaranteed. Postage paid.

JAS. E. ULSH, Box P, Beaver Springs, Pa.

QUALITY CHICKS
J. A. Baumgardner, Beaver Springs, Pa.

POULTRY PAPER 12 BIG ISSUES 25c

Write for pin this ad on a letter with your name and address and it is on with 12 issues of Poultry Paper for the next 12 issues of American Poultry Journal. Send 25c to Clara Street.

White Wyandottes—all ages, A.P.A. Certified. Disease free. Large type. Heavy bones. Large eggs. We have specialized in this breed for 20 years. Catalogue free. Sherman Bowden, Box 195B, Mansfield, O.

"Pure-bred" BARRED ROCK CHICKS
\$9 per 100; \$85 per 1,000; Heavy Mixed, \$8 per 100. Prompt Service. C.O.D. 100% free delivery guaranteed. CHAS. F. EWING, R. 1, Michigan, Pa.

PLEASE say: "I saw your Poultry in Pennsylvania Farmer."

Flemington, N. J., egg auction, through careful grading and standardization of the pack, has been able to obtain a premium over the highest New York quotations since it was started.

To Sprout Oats

I am thinking about an oat sprouter. Would like you to explain how to make one. Floyd Hoffner, Somerset county, Pa.

YOU can make an oat sprouter by constructing shallow trays about eighteen inches square, building a rack to hold them one above the other, leaving room beneath the bottom one for your source of heat, and enclosing the whole in a sort of cabinet.

However, oat sprouters are for sale very reasonably, and I suggest that if you look over the catalog of one of the large mail-order houses you will probably find as you can buy one about as cheap as you can build one. R. L. S.

Hens That Die

Our hens are dying right along. Some die on the nest. They eat well enough, but seem weak in their legs and stagger around as though they were drunk. York county, Pa. Mrs. E. M. Shindel.

BIRDS that have had coccidiosis earlier in the season sometimes act as yours do now. Some poultrymen report that the use of enteritis powder in such cases is beneficial. There is also a paralysis which is incurable. I suggest that you have your county agent look at your flock, as he can make a better diagnosis on the ground than I can without seeing your birds. R. L. S.

Friendly Talks

By
Edgar L.
Vincent

ARE your eyes fixed toward the top?

Almost every farmer has an ambition to do better than he ever did before. Not to have this aspiration is to set one's self down as a pretty poor farmer. When hope of rising a little higher in the scale of one's profession falls little incentive is left in life.

In order to realize one's dreams in this direction, one must do certain things. First, he must get the best stock he can, he must buy the choicest possible seed and he must put the soil of his farm in the most productive condition possible. Then, too, he must never be satisfied with his present knowledge of good farming. He must read and study and think and talk with other good farmers.

But a man must not only do certain things; he must be a better man than he ever was before. There is a way to take the contents of an egg out and leave the empty shell. Unless we have the heart of a good man to stand back of our fine plowing, planting and reaping, we are empty shells. The best has gone out of us.

I heard a young man say of his farmer father, "I have got the best father that ever was." He did not say anything about his success as a grower of crops, although no doubt he might have said a good deal. But he was thinking of those finer qualities which lift a man out of life's lower levels and place him where he will be loved and respected.

And let me tell you I would rather have the good opinion of my boys and girls as a good, kind, considerate father than to see my name written in the clouds as a grower of corn and wheat and potatoes.

And really, that is the greatest thing any of us can live for. The day is coming when we will stand before the Highest Court; and then the question will be asked us not whether we raised the best crops we could, important though that is, but, "Have you lived a good, clean, honest, white life?" That will determine our place throughout all eternity.



Eshelman

and the man on the farm

PERHAPS the natural growth of the Eshelman business, from a small local feed business four generations ago—Perhaps the fact that most of the workers in the Eshelman plants come from the farm—Perhaps the personal interest, from father to son for four generations, of men who themselves admire and raise poultry and livestock—Perhaps the Eshelman method of farm-testing each feed as it is developed—

Perhaps all these things keep a clearer picture in front of us of the necessity of profits to the farmer. And perhaps that is why the man on the farm, in increasing numbers, is using, and profiting by, Eshelman livestock and poultry feeds.

Since 1842 four generations of the Eshelman family have been in the feed business. The men who make Eshelman feed for you are most of them farm-raised. They bring a knowledge, an interest, a pride to their work—which produces better feed.

Eshelman
ESTABLISHED 1842
LANCASTER, PA.

The rewards of good judgment

Two yards of homespun fabric for a keg of salt! A quarter barrel of corn-meal for gunpowder and shot! In the regions beyond the Ohio settlers were bartering their produce for the trader's goods, for staples, for necessities of life. Each transaction required personal judgment. The buyer became at once a seller. Whether he drew the best of the bargain depended on his ability to match worth with worth.

Times have changed. Disposing of your crops, your livestock, your produce is one problem. Procuring machinery, fertilizers and supplies for the family's daily wants, is quite another. You get cash for what you sell and pay cash for what you buy. Yet proper buying now, as ever, depends on the correct interpretation of values.

Read the advertisements in this farm paper. They mean safer, better buying for you.

And the easiest way to decide what anything you need is worth—tractors, automobiles, radios, soap, furniture, household goods and the like—is to become a persistent reader of advertisements in reliable and reputable farm papers and magazines.

Only goods which the public has a good idea of worth their price can be persistently advertised. If you see a product continuously advertised, you can rest assured that it has the public's approval. The advertisements will honestly tell you what a product will do. When you are ready to buy—although at an early time in the season—your judgment as to the value of the advertised product will be based on the facts set forth in your paper.

Eshelman
LAYING MASH
Rich in protein and carbohydrates. Hens clean it up because of its appetizing flavor. Has produced unusual records.

Eshelman
RED ROSE 24
A high grade, complete, balanced ration, containing molasses. Palatable, digestible, adapted for feeding with low grade roughage.

Eshelman
GOLDEN ROD 25
A high grade, high protein, dairy ration, without molasses. Palatable and highly digestible. Especially well adapted for use with low grade roughage.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Eshelman
A 36-page illustrated book on raising, care and feeding of the dairy herd. Fully regarding price money of various breeds. Send FREE book on Dairy Cattle.

Here's how to make extra Christmas Money

If you keep chickens, there's an easy way to make extra money. By starting now, you can have some of it to spend for Christmas. And you'll have still more to spend later on.

The easiest way to get more income on a farm at this time of year is by setting more eggs from your flock. You will get more eggs by feeding Pearl Grit. Very often egg production is doubled within a few weeks. Try it and see for yourself. Just buy Pearl Grit, either in the 10-lb. box or 100-lb. sack, from your hatcheryman or feed dealer.

Lime and Grit in Natural Form Pearl Grit is made from the whitest, purest limestone. The pearly pebbles are attractive to fowls, but have no odor or flavor to cause overeating. Pearl Grit is the NATURAL form of lime AND grit.

Eggs simply cannot develop unless the pullet or hen has enough lime in her system to make complete eggs. That's why a flock's output may easily be doubled or trebled by supplying Pearl Grit. It is especially necessary in the fall and winter, and that's when eggs bring the highest prices.

This instructive book free The facts are all explained in our book, "The Poultry Raiser's Pay Envelope." It may be worth many, many dollars to you. Write us today for your free copy.

PEARL GRIT CORP.
113 Bridge St. Piquette, Ohio

PEARL GRIT

Truslow Chicks
Result of 49 Years Breeding
Let me give you a book telling about wonderful eggs and meat and high egg production. This about controlling diseases of chickens. Write for your free copy.

TRUSLOW POULTRY FARM, Inc.
Box P, Chesterwawa, Md.

NABOB FALL CHICKS AND DUCKINGS
of best quality. Postage paid and live arrival guaranteed. Fall chicks and ducklings are best for profitable broilers. Write now and secure eggs. Buy now and reap the profits. Matures broilers at right prices. 40 breeds to select. Catalog FREE.

NABOB POULTRY FARM, Box 22, GAMBIER, OHIO

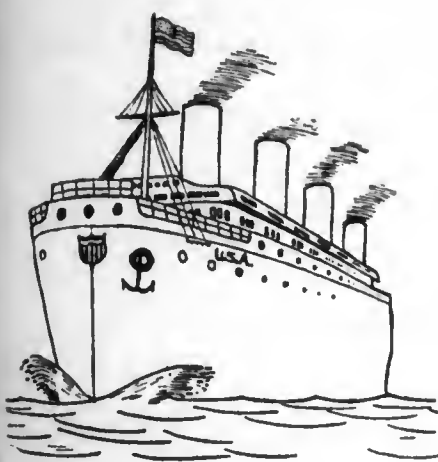
Navy Brand Concentrated Buttermilk
From Tuberculin Tested Cows
at per cent milk solids, 6 percent lactic acid, thick as custard with no foreign ingredients. Features long-keeping and insures against rancidity. Increases egg production and promotes fertility and hatchability. Good for chicks, broilers and laying flocks. Sold direct from factory in barrels of about 485 lbs. Half barrels, about 200 lbs.

TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, PA.

BROILER—RAISERS
SHIPPING CRATES LOANED FREE

SHIP YOUR LIVE BROILERS and other poultry to New York, United States, Europe, Japan, etc. We are bonded commission merchants. Write for returns made daily. Highest prices. Our outfit is complete. Inquire about us. Write for quotations. Address: P.O. Box 12, KRAKAU POULTRY CO., INC., 100 Washington Market, New York City.

500 MEN WANTED
To sell high grade Creamation products promptly. Reasonable prices made to suit. Salesmen outfit sent free. No salary company. THE HOME NURSERY, Box 109, GENEVA, OHIO



The Missing Scout

By ANNA KENDALL,

Pennsylvania

CRASH! The tent was crushed. A big oak limb had fallen on it. It was raining hard and we were standing in inky darkness.

For a moment we contemplated our plight in silence. Fred was the first to speak.

"Jiminy Christmas on ice, my poor pack!" was his characteristic exclamation.

"More like 'in water,'" I remarked, "but are you all here, fellows?" "Here!" "Present!" and "That's me!" rang out from the huddled boys. "But, where's Paul?" Robert asked in the same breath.

There was a moment's startled silence and then a frightened voice: "He must be under the tent!" It was Harold who voiced the common thought.

I still had my flashlight in my pocket and was just pulling it out, when there was a crash of thunder, followed by a blinding flash of lightning.

For a moment the wreckage of the tent, the surrounding trees and the huddled boys stood out clearly. There was just time to discern a leg protruding from the torn canvas of the tent before the intense darkness again covered all.

Paul Cannot Be Found

Another flash and the giant oak tree crashed to the ground. I was caught in some small branches but soon crawled out and went to Robert's aid. He was working frantically to free Harold.

Not far away Fred, using a piece of canvas, was fighting a fire which had been started by the lightning.

Then I thought of the limp leg we had seen in the wrecked tent. The light from the burning tree showed me at a glance that the leg had disappeared.

Greatly frightened, I left Robert helping Harold over the branches to the open ground, and hurried to the heap of wreckage. As I began to pull at the canvas Robert joined me and together we began to remove the debris.

Fred and Harold had gotten the fire nearly out by this time and I thought of my flashlight which I had dropped when the tree fell.

By the time I had found it and returned Robert, now aided by Fred and Harold, had made good progress and we were sure that we would soon find Paul.

We worked swiftly, turning over and removing everything that could possibly hide him but he was nowhere to be seen.

Finish the story.
This is thrilling! Where is Paul? and in a good ending for the story win a prize. Address your letter to Young People's Editor, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

The Hunter's Predicament

By GRACE MAE HAYLETT

An ending to the story published in the issue of October 18th.

BESIDES, he believed that would work. Bear really did not act as if she was him. But it would not do to take

The Young People



BE KIND TO DUMB ANIMALS

any chances, if he could get out of sight he would be all right. It was no use thinking of a battle with the old bear, he well knew who would come out second best.

While he had been thinking what was best to do, the little bears were whining and shaking themselves. Now Mrs. Bear was starting in their direction, so the hunter began slowly to retire.

Back of him a few paces was his bunch of rabbits. He disliked to sacrifice his game but it seemed the only way out of trouble, and a fierce growl from Mrs. Bear decided him quickly.

Snatching the rabbits from the ground, he gave them a great toss in the air, and they dropped near the little bears, frightening them.

This attracted Mrs. Bear's attention and as she hurried to her little ones the hunter made a hasty run in the other direction.

Soon he was out of sight and feeling safe, though sorry to lose his rabbits. It was much better to provide such a meal for Mrs. Bear than to have them feast on him.

Historical Contest

OF course, you are all trying to win the footballs and the jewelry which are the prizes for correct answers to the Historical Contest lists, and the best letter on "Why I Am Glad to Be an American." Next week the final list will appear. Have your letter ready to send immediately after you have answered next week's list. Keep this list with the other two until the final one appears.

List No. 3.

1. Who was the first President of our country to be born under the American flag?
2. Give the date of the Seminole War.
3. What President was known as "Old Rough and Ready?"
4. What President born in Pennsylvania was never married?
5. Who gave Virginia its name?
6. What does the word "Missouri" mean?
7. What is the date of the great earthquake in San Francisco?
8. What year was the Constitution of the United States adopted?
9. The Declaration of Independence was signed by how many delegates?
10. Name any five.

(Keep this list until the final list appears.)



The Funny Side

Bride (at butcher shop).—I want half a pound of mince, and cut it from a nice, tender, young mince, please.

A rooster discovered an ostrich egg and rolling it into the hen house said, "Now, ladies, I do not want to embarrass you, but here's a sample of what others are doing."

Why do they always call ships 'she'? I suppose it's because they glide along so gracefully?

Oh, no; it's because their rigging costs so much, and they go in for sails.

The moth leads an awful life. How come? He spends the summer in a fur coat and the winter in a bathing suit.

Sounds Foolish, But Is It?

Punctuate this and it will not sound so crazy:

A funny little man told this to me: I fell in a snowdrift in June said he I went to a ball game out in the sea I saw a jellyfish float up in a tree I found some rum in a cup of tea I stirred my milk with a big brass key I opened my door on bended knee I beg your pardon for this said he But 'tis true when told as it ought to be This a puzzle in punctuation you see

Little Folks' Corner

Rides in Mother's Mouth

BABY PELICAN is a queer looking creature, with an awkward bill and no feathers to speak of, writes Eleanor Hammond in The Girls' Weekly. He is covered with coarse yellow down. When he wants to yell "Mama!" he does not chirp nor caw nor quack nor sing—he says "Moo" very much like a cow!

These peculiarities, however, do not make his mother love him any less than a good old hen loves her attractive babies. Mrs. Pelican is devoted to her one or two children. She selects a secluded island off shore, when she can, for her nest, and she takes

care of the infant pelicans most lovingly. The Pelican family are fishermen. At dinner time Mrs. Pelican goes diving for food. She does not swallow the fish she catches, but brings them home in the leathery pouch beneath her eighteen-inch bill. Her pouch will hold about two gallons. While her children are young, she goes so far as partly to digest their fish for them, letting them help themselves out of her open mouth when the food is ready.

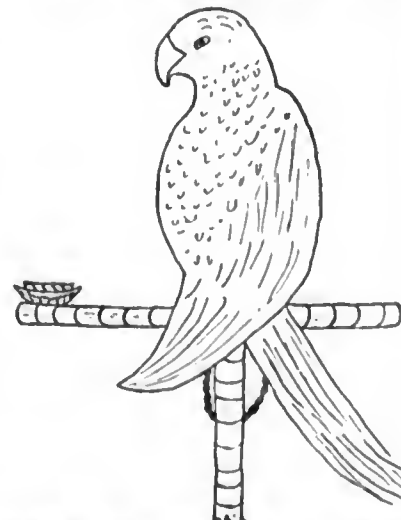
If danger threatens and Mrs. Pelican decides her family should be moved in a hurry, she scoops up her children into her pouch and flies off with them to safety. The well-behaved babies don't mind, and come out of her bill as good as ever.

HIDDEN FLOWERS

The names of flowers are hidden in this list of words:

- | | |
|-----------------|----------------|
| 1. We see Pat | 7. Stare |
| 2. Rendvale | 8. I pea nut |
| 3. In coat ran | 9. Love it |
| 4. Do rend log | 10. I run game |
| 5. To hire pole | 11. Notetinger |
| 6. O mad girl | |

(Watch for answers next week.)

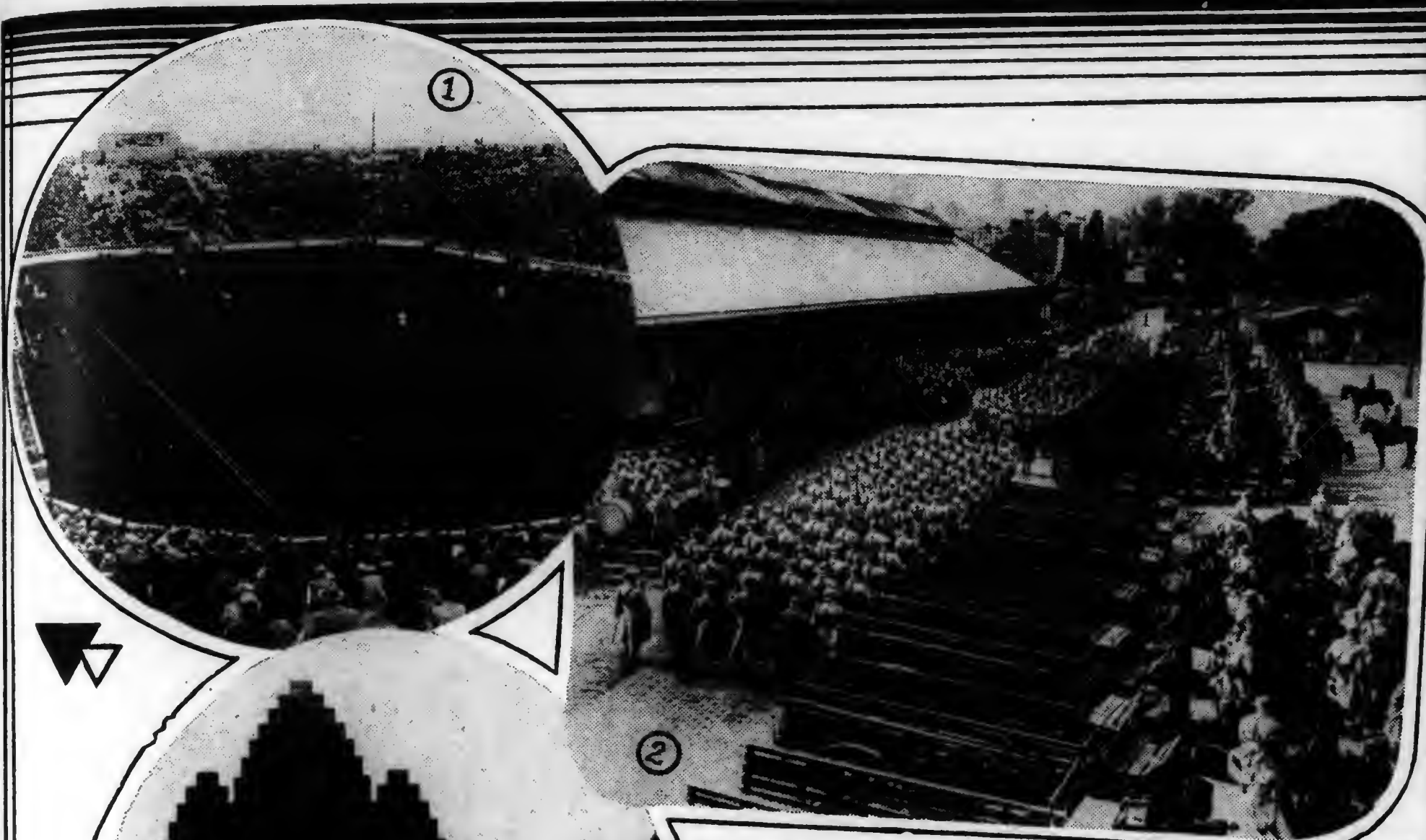


POLLY WANTS A BEAUTIFUL COAT

Beasle Kuliga, New Jersey

Color the parrot above and hurry it back to Little Folks' Corner, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa. Remember there are prizes every week for the best colored pictures.

PASSING EVENTS IN PICTURES



1. South Bend, Ind.—A general view of the beautiful new Notre Dame stadium, officially opened on October 11 when Notre Dame met the Navy. It has seating capacity of 55,000 and is to be used for football exclusively.

2. Beauvais, France.—Photo shows the impressive scene outside the railway station here when the French Army wagons, each containing two of the victims of the R-101 disaster, waited for the coffins to be entrained for Boulogne where they were placed on the destroyer Tempest.

3. A street of brick houses overshadowed by the massive modernistic Church of Grundtvigskirken in the suburbs of Copenhagen, Denmark, which gives the appearance of a giant outdoor organ.

4. Port Richmond, Staten Island.—An interesting view of the Kill Van Kull Bridge, the world's longest arch span, which will connect this city with Bayonne, New Jersey. It will be 1,673 feet long and will be opened to the public as a toll bridge in the early part of 1932. It is being built at a cost of about \$16,000,000.

5. Apparatus which will produce temperatures only 13 degrees above absolute zero, which is equal to approximately 436 degrees below on the familiar Fahrenheit scale, are now in use at the Bureau of Standards at Washington, where special low temperature thermometers are being calibrated by members of the Bureau staff.

This unbelievable cold is obtained by boiling liquid hydrogen at reduced pressure in a special bottle surrounded by a container filled with liquid air. R. B. Scott of the Bureau with apparatus.



(Copyright by Underwood & Underwood.)

Agricultural Engineering

By R. U. BLASINGAME

AROUND the first of November the weather usually becomes cold enough to cause oils and other lubricants to stiffen up. Oil or grease which becomes semi-solid or solid in low temperatures does not lubricate as well as thinner lubricants.

The well-known oil companies recognized this fact years ago and have conducted the necessary research to determine the cold weather requirements for the various parts of automobiles, tractors, trucks and other machinery. These oil companies have prepared charts showing the oil or grease which they recommend for winter and summer for different makes of automotive equipment. It is left for the public to take advantage of these facts.

Too often the man waiting on the trade at some filling stations has not informed himself about the lubricants he is selling. However, these lubrication charts are hanging on the walls of most filling stations and it takes only a minute or two to consult them and find out their recommendations for your car, truck or tractor.

Crank Case Dilution

When a gallon of fuel is burned in an internal combustion engine a large quantity of water results. This accounts for water dripping from the exhaust pipe. Some of this water will pass by the pistons down into the crank case. This water will mix with the oil forming a "sludge" in which ice crystals will form in freezing weather. The oil pump in the engine may not circulate this frozen oil if it becomes too thick.

And not all of the fuel which enters the engine cylinders will be evaporated and burned. Thus some dilution of the oil will take place on this account. In summer the crank case may run hot enough to evaporate some of the water and gas through the breather pipe. This is not true in winter. Therefore, it is advisable to drain the crank case more often in winter than in summer.

The colder an engine runs in winter the more dilution of the crank case oil from fuel and water will take place. Some tractors are provided with a curtain in front of the radiator which ought to be pulled up in cold weather. Many cars and some trucks are equipped with thermostatic regulators which maintain a high temperature, about 190 degrees F.

Thinner Oil for Winter

That oil, like syrup, tends to thicken in cold weather is the reason thinner or lighter oil is recommended for winter than summer.

Oil which is too thick or viscous does not flow readily in winter, and interferes with starting an engine because it creates so much friction between the cylinders and pistons. An automobile battery is likely to be run down starting the engine when cold and every moving part stuck fast with oil which is too thick. One's constitution, religion and self-restraint are likely also to be exhausted cranking a tractor in cold weather when too heavy oil is used. Then when the engine is started too often we race it unmercifully. Racing an engine is bad practice even in warm weather when the oil flows freely; but a cold engine doesn't get much lubrication when extremely cold, especially when the oil is too thick to start or needs to be drained due to dilution from water.

Transmission, Differential

One of the best times to drain the crank cases of trucks, tractors and automobiles is when they are warm from driving.

The same is true of the transmission case. Some garages are equipped with steam jets for heating transmissions for draining. Most of the

well-known oil and lubrication companies make special light lubricants for the chassis for winter use. Very thick lubricants suitable to summer ought to be replaced with lighter ones for winter.

Pennsylvania agriculture stands near the top in the use of power



Living just around the corner, a mile and a quarter, from the world's largest sauerkraut factory at Phelps, N. Y., makes a good reason for C. Constan DeWind to plant 20 acres of cabbage each year. He is sure of a cash market whether the yield is eight or 37 tons to the acre, both of which marks he has experienced. The photograph shows him on the highway with a load of over four tons for which he received \$8 a ton, the market price one day in early September. In a good season with two teams of this kind he has delivered from 35 to 40 tons a day to the factory. Thos. H. Wittkorn.

A 9-000 Acre Farm in Germany

(Continued from page 8.)

The early potatoes are first sprouted in bushel crates kept in glass houses. The early potatoes are harvested by July 15 and the land is planted to late cabbage or other late vegetable crops.

Alfalfa, which we learned yields in three cuttings five tons of hay, is also seeded in rows ten inches apart and frequently cultivated. This crop receives annually 400 pounds superphosphate or basic slag and 350 pounds of muriate of potash per acre. Limestone, or chalk, is applied in liberal amounts at the time of seeding.

The green peas crop is cut with a mowing machine when the vines contain the maximum fruit at the proper stage of maturity. The laden vines are hauled to the barnyard in large hay racks and immediately threshed. The vines as they come from the field are passed through large threshers or separators, provided with revolving perforated cylinders. The shelled peas as they come from the separator are graded into four sizes according to the stage of maturity.

The carrots, peas, beans and spinach are delivered to canneries. The cabbages (Danish ballhead, I believe) are made into sauerkraut—you could guess that, couldn't you? The potato crop, for the most part, is converted into alcohol (92 per cent pure). Some of the potatoes, of course, are used for human consumption. The sugar beets which contain about seventeen per cent sugar are sold to the sugar beet factories at from \$7 to \$9 per ton. This crop then brings in a gross income of about \$115 per acre or a total of \$83,000. The alfalfa is fed to swine and other stock and the wheat is sold to the flour mills.

By-Products

The sugar beet and potato pulp are fed to swine, along with alfalfa and sufficient concentrates to balance the ration. The green pea vines and other vegetable waste are returned to the field for green manuring (an excel-

lating equipment per acre and the oil companies are well distributed throughout the state. There is a lubricant for every machine, suited to winter or summer use. If the local garageman does not have charts showing the grade lubricant you need, a postal card or a letter to one or more of the well-known oil companies will bring one full information.

We change our clothing from light to heavy from summer to winter; oil is just the opposite, from heavy to light.

over there—What a grand and serious feeling!

Labor is abundant and cheap, and is high and scarce. Just the reverse with us. During the busy season Dr. Schurig employs 800 laborers, 200 men and 600 women. Almost no man's land. The number of people to feed per acre is much greater over there and more food must be produced per acre.

Local economic conditions seem to favor our German farmer. When his neighbors all grow barley and rye, the chief grain crops used for brewing purposes, he produces wheat. When too many potatoes flood the market, he converts his into alcohol. Under conditions of low prices for beet sugar he can also convert his sugar beets into the same product. In case of an overproduction of alcohol, the surplus potatoes are made into starch or potato flour. When too much sauerkraut appears, the cabbage can be sold as such. The vegetables in excess of seasonal demands are sent to the cannery. If our German farmer should follow the practice of his Holland neighbors, he can convert his excess of wheat straw into paper. Thus you see the advantages of European economic conditions. Necessity is surely the Mother of Invention.

Golf and Meat Production

THERE would offhand seem to be a little connection between the knicker-clad, cap-thatched, caddy-attended golfer and the silo-hung corn-husking farmer; but there is. There seems to be in a casual way a connection whatever between this same farmer and the evening parliker who stops under a tree for a paper and leaves the farmer his newspaper lunch cloth, his paper plates and his lunch scraps scattered around, but there is. There was never supposed to be the slightest connection between the "embattled farmers" on the one hand and the army of urban hunters who swarm the country in the fall for days to find a few rabbits or maybe a partridge or so; but there is.

There have been pleas by the hundreds by farm-interested people in the cause of eating more meat; campaigns sponsored by funds well up toward the millions have both cunningly and emphatically tried to get the city folks to eat more meat of one kind and another. Pork-cakes "offensives" seem to have been strangely absent—but not so strangely when you take stock of the simple cause and effect of things. The pork eater is known to be a laboring man in the main. He earns his pork pot only in the sweat of his brow but, the sweat of his arms and his shoulders and the sweat of his whole laboring body.

Tangible Results

What's the use of appealing to the namby-pamby, flabby-muscled populace to eat more meat, when they haven't the physical "beef" to digest the kind of food that makes hard muscles and sound organs? All of us have our physical ups and downs and our appetites go up and down like a barometer with our zest and "feelings." The old-time religion and morality used to urge and expect people to be good—and then they would be happy. Now the course of human events has turned the matter right around and fact says, "Be happy and you will be good as a logical result."

Possibly money raised to help city people into eating more meat would produce much more tangible results if it were invested in golf courses to be presented, distributed and dispersed among the populace in the interest of creating an appetite and a physical constitution that would crave meat and that could assimilate a good-sized steak when eaten.

G. P. W.

Truck Crops

By GILBERT S. WATTS

THE longer evenings that have come with the shorter fall days give an opportunity for reading that is denied the very busy grower in midsummer. The writer has been enjoying catching up with the rich horticultural literature that has come to his desk since the rush of spring began. There are bulletins from experiment stations, periodicals and reports of growers' organizations. Some of the richest gleanings follow.

"MANY failures are charged to adverse weather and economic conditions when they really should be chalked up against our own mismanagement and ignorance." Grower in Market Growers' Journal.

FITTING to follow that quotation is this from the New Jersey Horticultural Society News: "W. K. Hookstra produced 146 tons of tomatoes on approximately ten acres during the season of 1930."

SPEAKING of mulch paper: "At present, its greatest usefulness seems to be for the home gardener who is not so much concerned about its cost and the increased earliness or yield from its use as he is in its controlling weeds.... Covering the entire edge of the paper with two or three inches of soil has been the most satisfactory method of anchoring.... The present high acre cost of the material and hand labor required in its use limit its profitable use on a commercial scale to those crops of high acre value on which it produces the greatest stimulating effect on either earliness or total yield, or both." Bulletin 447, Ohio Agricultural Experiment Station.

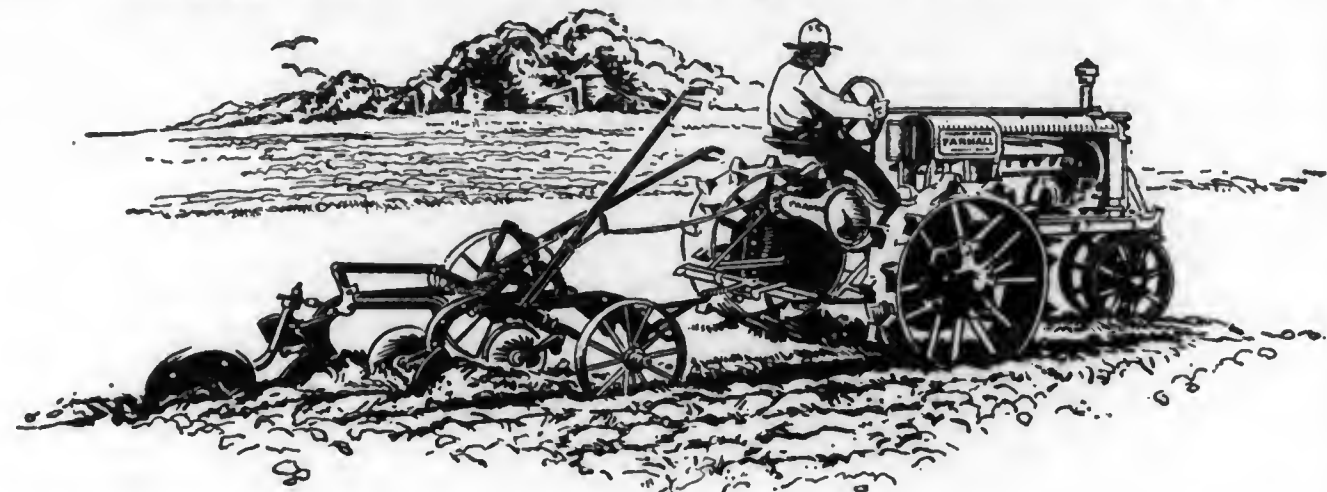
AT the Ohio Experiment Station a study was made of the yield from strawberry runners formed in different months of the previous season, variety Premier. Briefly, 6,035 runners that were formed before September first produced 232 quarts of berries the next season. In comparison 4,502 runners that were formed after the end of August produced but 37 quarts of berries the next season. In other words, 26 of the plants in the earlier group produced a quart of berries, whereas 122 of the plants in the later group were required to produce an equal quantity of fruit.

As a result of a strawberry fertilizer experiment the same bulletin contains the suggestion: "If only one application of nitrogen is made, mid-August or early September is probably the best time for it. Try 250 pounds per acre of sulphate of ammonia or a corresponding amount of other nitrogen fertilizer."

"PREMIER is the most extensively grown strawberry in Pennsylvania. However, history shows that no variety of this important fruit is able to hold first place for an indefinite period. Sooner or later a newer and better variety will supplant it. It is possible that Aberdeen will have this distinction. In a demonstration in Allegheny county it occupied first place, Premier second and Wm. Belt third." R. L. Watts in Market Growers' Journal.

"LOCAL markets are no longer local. Long distance trucks carry produce for hundreds of miles and the confusion resulting from the use of one package in Detroit, another in Toledo, and another in Cleveland is becoming serious." Market Growers' Journal. (What proportion of Pennsylvania grown vegetables are packed and packaged in a manner that makes them acceptable and attractive to the wholesaler who caters to buyers from outside markets and to the chain store buyer whose purchases are distributed great distances from a central warehouse?)

"Increase Your Profits by Lowering Your Production Costs"



Do you know the Full Meaning of "FARMALL" and "Farmall EQUIPMENT"?

THE FARMALL Tractor, by itself, is a general-utility power plant for any farm. Farmall Equipment is designed to make additional use of the power of the FARMALL Tractor—that's why it increases the value of the FARMALL.

The FARMALL, by itself, is a practical, economical tractor that applies its power at drawbar, belt, and power take-off. It plows two furrows; pulls all seed-bed implements; pulls and powers grain and corn harvesting machines; operates threshers, ensilage cutters, huskers and shredders, feed grinders, corn shellers, saws, pumps, etc. It is the original all-purpose tractor.

Of all the special pieces of Farmall Equipment, you will need only machines designed for the crops you raise. If you grow corn you will probably want a planter, cultivator, and maybe a corn picker. For cotton, you will be interested in

a planter, cultivator, and perhaps a duster. You will want a power mower if you have hay, and you may have use for a sweep rake. Potato growers can use a cultivator and the new power-drive digger. Farmall hitches make it easy to use much of the machinery already on the farm.

The Farmall System of Farming is the perfect combination of Power and Equipment for a great amount of work at high speed and low cost. It greatly increases the range of power farming. It makes horseless farming a reality. More than 100,000 FARMALL Tractors are now on farms in all sections and on all crops (more than 1,000 FARMALL owners are farming entirely without horses). See the FARMALL Tractor and Equipment for your own crops at the McCormick-Deering dealer's store. Write us for information.

INTERNATIONAL HARVESTER COMPANY

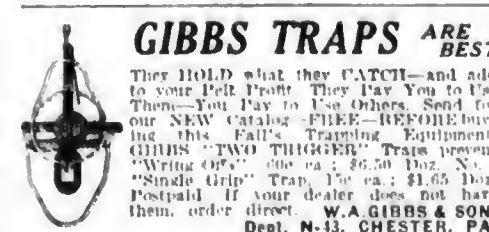
606 So. Michigan Ave. OF AMERICA Chicago, Illinois

(Incorporated)
Branches at Pittsburgh, Harrisburg, Philadelphia, Pa.
and at 95 other points in the United States.

McCORMICK-DEERING FARMALL TRACTORS



A great, responsible, successful, 40-year-old company now makes this surprising offer to loaned men. Invest no capital! Let us start you in this permanent business that will pay you and control for yourself. Become the authorized McCORMICK Dealer and handle the complete McCORMICK line—new red tape and no division of line. We finance you. You extend credit to your own friends and customers when you please, this is a certain number of these "no-investment" investments are open. Each one offers a good living with a chance to get your money in the bank every week. House, stocks, much who write promptly are assured of first consideration. Write today and ask for "no-investment" offer. Address: McCORMICK & COMPANY, The House of Friendly Service, Desk D-5311, Winona, Minn.

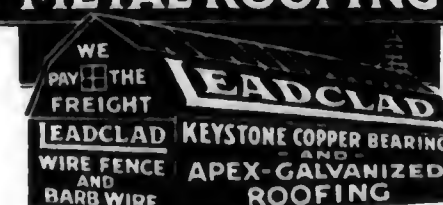


THEY HOLD what they WANT—and add to your Profit. They Pay You to Use Them—You Pay to Use Them. Send for our NEW CATALOG—FREE—REPLYING. This Fall, Training Equipment GIBBS "TWO THUNDER" Trap, 100 lbs. "Single Grip" Trap, 100 lbs. "Double Grip" Trap, 100 lbs. "Postall" If your dealer does not have them, order direct. W.A. GIBBS & SON, Dept. N-13, CHESTER, PA.

OKLA. FARMER KILLS 172 RATS IN ONE NIGHT

K-R-O (Kills Rats Only), writes Mr. H. H. Hulbert, Okla., brought this remarkable result. K-R-O is the original product made from squill, an ingredient recommended by U. S. Government as sure death to rats and mice but harmless to dogs, cats, poultry or even baby chicks. You can depend on K-R-O (Kills Rats Only), which has become America's leading rat exterminator in just a few years. Sold by all druggists on a money back guarantee.

METAL ROOFING



CONSUMERS MFG. & SUPPLY CO. Dept. F, Mountville, W. Va.

LET US TAN YOUR HIDE

FUR DRESSERS and TAXIDERMISTS SEND FOR CATALOG
The Crosby Frisian Fur Company
864 Lyell Avenue Rochester, N. Y.

New-fangled Contraptions

Grandfather came home from his annual visit to the Fair and said he had seen a plow with wheels and a driver's seat. He didn't think much of it. It was twenty-five years before anybody in that locality owned a sulky plow.

The first mowers, cream separators, sprayers and incubators, and the early sewing-machines and carpet-sweepers were treated in the same way. It used to take the neighbors in the next county five or six years to learn that a better implement had been made, and when they did find out they either laughed at it or ignored it.

Today, in half that time, people in all the forty-eight states have the new tool at work on their farms or in their homes. Modern advertising takes an improved product, gives it a name and a trade-mark, builds it to a definite standard of quality, places it in every good hardware and implement store in the country, and tells you why you should own it and where you can get it.

In Two States

By W. D. ZINN

FEW weeks ago I attended a Jones reunion in Marion county near Fairview, W. Va. This meeting was held in an orchard of a member of the family and was largely attended. The president called a group of farmers around the stand and introduced the writer, telling the farmers they could ask me questions until lunch was served.

The questions came thick and fast, and I have not spent an hour this season more pleasantly. I would much rather talk with farmers than to talk to them, and I believe farmers get more out of such talks.

When lunch was announced we all gathered around one of the longest and most heavily laden tables I have seen for years. This table proved that hard times and want had not hit the Joneses. We have had a lot to say about farm relief. This family was relieved of a large quantity of eatables on this occasion. I am one of those who believe that supply and demand have much to do with the price of any article. Believing this, I am going to prophesy that poultry will be high in this community for some time. I think we ate most of the supply.

Some Good Points

There were several things I liked about this reunion. First, it was held on Saturday and not on Sunday. The location was fine, the people came early and entered into the spirit of the meeting at once, and the behavior of the crowd could not have been better.

The writer gave what was called the address of the day in the afternoon to a crowd that could not have been excelled in giving attention.

Before the days of automobiles it would have been utterly impossible to reach our appointment for lunch the next day. For more than fifteen years I had been invited each year to a Zinn reunion, which was being held one year in Ohio and the next year in Indiana. This meeting was in Van Wert county, Ohio, but near the Indiana line. Leaving the Jones reunion at three p. m. we drove to Wheeling, thence through Belmont county, Ohio, where we saw the worst effects of the drought we have seen anywhere this season. The pastures were brown and we saw shrubbery in the lawns and apple trees in the orchards that were dying.

Knowing that we were to lunch with the Zinns on Sunday we drove to Columbus that night, arriving there a little before midnight. I asked the clerk at the desk if he had any more five o'clock calls left. His reply was, "Just one." I said, "Give us that one." Sometimes sleeping must be made a matter of second consideration if we are to meet our engagements.

With the Zinns

We drove to Marion for breakfast. The waiter looked at us most inquisitively when we made our second order for griddle cakes. My nephew, Lynwood Zinn, had been told before we left home that my car was so geared that it could not exceed 35 miles per hour, but I saw that we were going to reach our destination too late if we did not make better time and I said, "Lynwood, step on the gas." Boys never have to be told to speed up but once. Lynwood was soon going like a bat, better than 40; and this speed brought us to the meeting on time.

Here again we had evidences of the fact that the Zinns as well as the Joneses had plenty to eat. The lunch hour being over the president called the meeting together and introduced the writer. Among other things I told them that the Zinn family possessed one peculiarity which I had never seen in any other family, and that was that the women were frugal, while the men without exception were as ugly as sin. The women

seemed more inclined to agree with the statement than the men.

After visiting with these good people until three p. m. we bade them good bye and headed for Dayton. We were glad to see that Van Wert and adjoining counties had not been hit so hard by the drought. The crops looked good and the meadows and pastures were green. Arriving at Dayton about dark we stopped at the Hays Hotel, which is run by the Hartman Bros., sons of Dr. James Hartman, formerly of Ritchie county, W. Va., but now of Parkersburg. These boys have long since learned the secret of success in the hotel business and that is of making their guests feel at home. They are having the success that they so much deserve.

An Old Friend

Having previously notified my good friend C. R. Titlow that I was going to come to his part of the state, and having received a letter from him stating that he would lay off as many days as I would stay with him, I had my nephew drive me out to Mr. Titlow's on Monday morning, but he returned to Dayton because the proprietors of the Hays Hotel are his uncles.

Mr. Titlow for many years was assistant Director of Extension work in Ohio under Mr. Graham, but about 1911 or 1912 he came to West Virginia and became Director of Extension work here. No man ever came to our state who made more friends and no man ever came here who did more for the farmers of the state. Later he was called to the Federal Farm Loan Bank in Baltimore where he remained for eleven years and I suspect he would have been there yet but his physician told him that he would be in his grave in six months if he did not get out of the bank.

Mr. Titlow is like the writer, he wants to live just as long as he can be of service to humanity. All these years he has held on to the old farm and dreamed of how he would remodel the splendid old house. electrify it

and put in all kinds of modern equipment. He also planned how he would build up that old farm and make it produce many times what it has been producing in his absence.

He has been back on the farm only two years, but he has realized on his dreams. He has a beautiful home and his farm is growing much better crops. He keeps a fine herd of Jersey cows. When I asked him who milked them his reply was, "I do." One thing that made Mr. Titlow so popular with the people whom he served was that they saw he was not afraid to work. When I met him on his farm he had his overalls on and looked very much like a farmer.

"The Biggest Rabbit"

"I am happy out here and my good wife and children are all happy. Why should I not stay on the farm?" said Mr. Titlow. Mrs. Titlow had lived eighteen or twenty years in the city, but she was just as anxious as her husband to get back to the farm. They have three children, two boys and a girl, and they too are interested in the farm and home.

Many a time Mr. Titlow had told me that he was going back to the farm, but I hardly believed it, for he has such rare ability to work for and with people that I felt he would be kept at that job. I am still "from Missouri" on the question, for he has given the supervisor of farmers' institutes permission to schedule him, and the superintendent has asked him to take a lengthy schedule for the winter. When he goes out no speaker on the force will leave more admirers behind him and these will constitute such a drawing force that it will be very hard for him to resist the temptation to go out and help the people.

The visit with the Titlows was a great visit. As I drove away I was reminded of my oldest brother who when a boy was very fond of rabbit hunting; every rabbit he killed he declared was the biggest rabbit he had ever seen. I felt that this was the best visit I had ever made.

My work during the last thirty years has thrown me into hundreds of homes and many have been the pleasures I have enjoyed. The world has been very kind to me and has given me a great deal of joy.

Philadelphia Produce Review

POTATO markets in the East were generally steady during the past week, but the demand was slow in practically all cities. Potato digging is practically finished in New York state, but growers consider prices low and are not shipping in any large volume. Pennsylvania potatoes sold within a range of \$1.75 to \$2 per 100-pound sack in Philadelphia, Baltimore and Pittsburgh.

The apple market continued dull with a slow demand. Prices have not shown any material change for a month or more. Shipments are running heavy and have exceeded 1,200 cars daily but a large part of this stock is moving into cold storage. The export trade has been fairly satisfactory with considerable quantities of Ben Davis and other suitable varieties being packed for shipment. During September exports totaled 123,000 barrels and 549,000 boxes. In the Eastern markets Stayman ranged from \$1.15 to \$1.25, Rome \$1.25 to \$1.35, Rhode Island Greening \$1.15 to \$1.25 and Baldwin \$1.15 to \$1.25. McIntosh sold at \$5.00 per barrel in New York.

"Sweets" and Cabbage

Sweet potatoes have not shown any improvement and prices have tended lower during the past month. New Jersey yellow sweets sold at \$1.25 to \$1.35 per bushel in the Eastern cities with Maryland and Delaware stock bringing \$1.15.

Cabbage markets were lower and Pennsylvania stock sold at \$1 per 100-pounds in most markets. Bulk stock ranged from \$15 to 20 per ton. The butter markets were irregular during the past week. Prices of top scores held fairly steady during the early part of the week but dropped sharply at the close. The medium and undergrades accumulated and receivers were eager to sell with prices

largely a matter of negotiation.

Poultry Steady

The live poultry market in New York was steady for good stock but prices of the poorer grades were irregular. Receipts were fairly liberal and the quality of most offerings only fair. Buyers were looking for fancy stock. Leghorn fowls sold at 20 to 25¢ per pound, colored fowl at 20 to 25¢. Leghorn chickens at 15 to 18¢, Rhode Island Reds at 18 to 22¢ and Plymouth Rocks at 20 to 25¢.

Receipts of dressed poultry were moderate and prices fairly satisfactory. Nearby broilers brought 25 to 34¢ per dozen, chickens 24 to 30¢ and fowls 20 to 28¢. Some turkeys were offered at 35 to 45¢.

Fresh and Storage Eggs

The egg market in New York showed a steadier tendency and there was less fluctuation in price. The best quality whites advanced one cent per dozen. Henery white eggs sold within a range of 23 to 25¢ per dozen, browns brought 30 to 35¢ and mixed colors 19 to 23¢.

The egg market in Philadelphia was firm on the better grades. Carton eggs were reported selling as high as 60¢ per dozen in case lots. The majority of the trade that uses the nearby eggs have switched to Pacific Coast white processed eggs. These eggs have been dipped in a specially prepared hot oil and then placed in storage. The oil seals the pores in the shell and prevents evaporation. This stock was selling at 35 to 36¢ in a wholesale way.

There were very few fresh western eggs available and most business in western was restricted to short held stock. This means stock that was bought in late August or September and has been in storage since that time. The market for storage eggs was very weak.

Produce Quotations

PHILADELPHIA
Butter.—Higher than extras, 42 to 45¢; 35¢; 41¢; 90 score, 35¢.
Eggs.—Fancy select, 35 to 45¢; extra, 35¢; 1st, 32¢; second, 25 to 28¢.
Poultry.—Live fowls, 10 to 25¢; 15 to 25¢; old roosters, 15 to 18¢; pigeons, 15 to 25¢; ducks, 15 to 18¢; turkeys, 20 to 25¢.
Fruits.—APPLES, N. J. & Pa., 1/4 bush, various varieties, 40 to 55¢; fancy, 55 to 60¢; CRANBERRIES, N. J., 1/4 bush, boxes, various varieties small, \$2.50 to \$2.75; PEARS, Pa. bus., Kiefters, 75¢ to \$1; CHESTNUTS, Va. & Tenn., per lb., 6 to 8¢; WALNUTS, N. J., 1/4 bush, \$1.
Vegetables.—BEANS (Snap), S. C. bus., hump, green flat, \$3.25 to \$3.50; BEETS, Pa. & N. J., per bunch, 10 to 15¢; BRUSSELS, SPROUTS, L. I. & N. J., per quart, small, 10 to 12¢; CARROTS, Pa. & N. J., per bunch, 10 to 12¢; CABBAGE, N. J., 1/4 bush, 10 to 12¢; CAILIFLOWER, N. J., crates, Big Boston, 5 to 6¢; CELERY, Pa. & N. J., wired bunches, 10 to 12¢; ESCAROLE, Pa. & N. J., bus., 10 to 12¢; ENDIVE, Pa. & N. J., bus., 10 to 12¢; KALE, Pa. & N. J., bus., 25 to 30¢; LETTUCE, N. J., crates Big Boston, 5 to 6¢; MUSHROOMS, Pa., 3-lb. baskets, white, 8 to 8.5¢; PARSLEY, Pa. & N. J., bus., bunch, curly, 50 to 75¢; PARSNIPS, Pa., 1/4 bush, 50 to 75¢; PUMPKINS, N. J., 1/4 bush, 10 to 12¢; PEPPERS, N. J., 1/4 bush, 10 to 12¢; RUTABAGAS, Pa. & N. J., 1/4 bush, 10 to 12¢; SPINACH, Pa. & N. J., bus., 10 to 12¢; TURNIPS, Pa. & N. J., 1/4 bush, white, 10 to 12¢; TURNIP TOPS, N. J. & Va., 5 to 6¢; SWEET POTATOES, N. J., 1/4 bush, red and white, 10 to 12¢; WHITE POTATOES, N. J., 1/4 bush, red and white, 10 to 12¢; SWEET POTATOES, N. J., 1/4 bush, red and white, 10 to 12¢.

NEW YORK
Butter.—Higher than extras, 40 to 45¢; extras, 39 to 41¢; 1st, 34 to 38¢; 90 score, 35 to 38¢; 80 score, 34 to 37¢.
Eggs.—White, nearby and nearby, 35 to 40¢; selected extras, 32 to 35¢; extra, 30 to 32¢; average extras, 15 to 20¢; medium, 30 to 32¢.
Fruits.—APPLES, baskets, N. J. & Pa., mixed varieties, 25 to 45¢; CRANBERRIES, Eastern, 1-bus. baskets, 75 to 85¢.
Vegetables.—BEETS, State and Jersey, cut, basket, 50 to 60¢; CABBAGE, nearby, 10 to 12¢; CARROTS, State, cut, basket, 10 to 12¢; CELERY, State, cut, basket, 10 to 12¢; CAILIFLOWER, Catskill, best, cut, 12 to 15¢; LETTUCE, State, cut, 12 to 15¢; PARSLEY, Jersey, basket, 50 to 60¢; PEPPERS, Jersey, bunch, 50 to 60¢; ROMAN, Jersey, cut, 10 to 12¢; SPINACH, nearby, cut, 10 to 12¢; SQUASH, nearby, 10 to 12¢; TURNIPS, Jersey, 10-lb. carton, 10 to 12¢; TURNIPS, nearby, Rutabaga, 10 to 12¢; WATERCRESS, 100 bunches, 10 to 12¢; POTATOES, L. I., No. 1, 15 to 18¢; No. 2, 12 to 15¢.

LANCASTER
Butter.—Country, 14 to 15¢; separator, 14 to 15¢.
Eggs.—Fresh, 15 to 20¢; pullet, 15 to 20¢; Hens, 20 to 25¢; 1st, 25 to 30¢; 2nd, 20 to 25¢; 3rd, 15 to 20¢; dressed, 15 to 20¢.
Fruits.—APPLES, 10 to 15¢; PEARS, 10 to 15¢; CRANBERRIES, 10 to 15¢; WALNUTS, 10 to 15¢; CHESTNUTS, 10 to 15¢; PEPPERS, 10 to 15¢; RUTABAGAS, 10 to 15¢; SPINACH, 10 to 15¢; TURNIPS, 10 to 15¢; SWEET POTATOES, 10 to 15¢; MUSHROOMS, 10 to 15¢.
Vegetables.—BEANS, 10 to 15¢; CABBAGE, 10 to 15¢; CARROTS, 10 to 15¢; CELERY, 10 to 15¢; CAILIFLOWER, 10 to 15¢; ENDIVE, 10 to 15¢; KALE, 10 to 15¢; LETTUCE, 10 to 15¢; PARSLEY, 10 to 15¢; PARSNIPS, 10 to 15¢; PUMPKINS, 10 to 15¢; PEPPERS, 10 to 15¢; RUTABAGAS, 10 to 15¢; SPINACH, 10 to 15¢; TURNIPS, 10 to 15¢; SWEET POTATOES, 10 to 15¢; MUSHROOMS, 10 to 15¢.

YORK
Butter.—Country, 14 to 15¢; separator, 14 to 15¢.
Eggs.—Fresh, 15 to 20¢; pullet, 15 to 20¢; Hens, 20 to 25¢; 1st, 25 to 30¢; 2nd, 20 to 25¢; 3rd, 15 to 20¢; dressed, 15 to 20¢.
Fruits.—APPLES, 10 to 15¢; PEARS, 10 to 15¢; CRANBERRIES, 10 to 15¢; WALNUTS, 10 to 15¢; CHESTNUTS, 10 to 15¢; PEPPERS, 10 to 15¢; RUTABAGAS, 10 to 15¢; SPINACH, 10 to 15¢; TURNIPS, 10 to 15¢; SWEET POTATOES, 10 to 15¢; MUSHROOMS, 10 to 15¢.
Vegetables.—BEANS, 10 to 15¢; CABBAGE, 10 to 15¢; CARROTS, 10 to 15¢; CELERY, 10 to 15¢; CAILIFLOWER, 10 to 15¢; ENDIVE, 10 to 15¢; KALE, 10 to 15¢; LETTUCE, 10 to 15¢; PARSLEY, 10 to 15¢; PARSNIPS, 10 to 15¢; PUMPKINS, 10 to 15¢; PEPPERS, 10 to 15¢; RUTABAGAS, 10 to 15¢; SPINACH, 10 to 15¢; TURNIPS, 10 to 15¢; SWEET POTATOES, 10 to 15¢; MUSHROOMS, 10 to 15¢.

PITTSBURGH
Butter.—Nearby tubs, 92 score, 32 to 35¢; standards, 35 to 38¢; 90 score, 32 to 35¢.
Eggs.—Nearby firsts, second-hand, 32 to 35¢; 1st, 32 to 35¢; 2nd, 25 to 28¢; 3rd, 20 to 25¢; dressed, 15 to 20¢.
Poultry.—Live hens, heavy, 20 to 25¢; Leghorns, 12 to 15¢; Rhode Island, 15 to 18¢; Plymouth, 18 to 22¢; mixed, 15 to 18¢; ducks, 15 to 18¢; turkeys, 20 to 25¢; pigeons, 15 to 18¢; CRANBERRIES, 10 to 15¢; WALNUTS, 10 to 15¢; CHESTNUTS, 10 to 15¢; PEPPERS, 10 to 15¢; RUTABAGAS, 10 to 15¢; SPINACH, 10 to 15¢; TURNIPS, 10 to 15¢; SWEET POTATOES, 10 to 15¢; MUSHROOMS, 10 to 15¢.

CHICAGO CASH GRAIN
Chicago, Nov. 3.—The following cash prices for grain: No. 2 hard winter wheat, 77 to 78¢; No. 2 yellow corn, old, 74 to 75¢; No. 2 white corn, old, 86 to 87¢; No. 2 white corn, new, 88 to 89¢; No. 2 rye, 50 to 51¢.

Farmer's Business Letter

DULLNESS continues in grains. The trend this week was lower, wheat declining one cent, for the week, corn four cents and oats two cents, in round numbers. Corn husking is well under way, the weather being favorable and the crop while light is of excellent quality. Farmers are not anxious to sell, as they believe that there will be more money in feeding than in selling it. Of course, there are always some who must sell, and they are likely to supply the needs of the market.

That much wheat is being fed there is no doubt, some holding that enough of the crop will be disposed of in that way to take care of the surplus. Figures on this will no doubt soon be available, that is better estimates than have so far been made. While reports tell us that Europe must get some wheat here there is no evidence yet that they are anxious about supplying their needs.

Favorable Hog Outlook

There was a seasonal decline in hogs this week, amounting to 50 to 65 cents on light weights, now making up the big share of the run. Still the outlook for the long pull is regarded as favorable, factors mentioned a six per cent reduction in the spring crop of hogs, reduction in the number of hogs slaughtered; small quantity of lard and pork in storage; short corn crop resulting in many hogs going to market light in weight; curtailed breeding of hogs because of light corn crop, and the behavior of the markets. Previous years under similar conditions. Only two unfavorable factors are mentioned, the business depression and export weakness.

Eleven markets had 552,000 hogs this week, a gain of 55,000 over last week, and \$1.00 over the same week last year. Weight continues to run light, 230 lbs. this week against an average of 238 pounds for the same week of the past five years. Average price of hogs this week was \$9.15, 20 cents under last week, the same as a year ago and ten cents above two years ago. Fresh pork is selling lower.

Light October

The eleven market run of hogs during October, at 2,119,000 head, was second smallest for the month since 1921. In the futures market the hogs sold about the same notch as last week. Light weights sold at \$8.75 for December delivery, \$9.25 for January, and \$9.50 for March; medium weights brought \$8.50 for January and \$9.25 for March. This trade was not so good this week, only ten car-lot transactions being recorded. There is said to be dissatisfaction with the rules and changes may be necessary.

October average price of hogs was \$9.15, against \$10 in September and \$9.50 in August. A year ago October hogs averaged \$9.50 and two years ago \$9.80.

Fewer Lambs

Sharply curtailed receipts helped the lamb market to some recovery this week, the net gain being about 50 cents. Only 97,000 were here against 120,000 last week. Top price this week was \$3.50, just a dollar under last week's peak. Average lamb price at \$3.50 was 45 cents under last week. During the past two months Chicago has handled more than 1,000,000 lambs and sheep, the largest total for two consecutive months since 1921.

Demand for feeding and breeding stock has been brisk all week. The number of breeding ewes on the market this fall has been much smaller than most traders expected. Some are saying it difficult to get good young ewes, selling at \$6 to \$6.50 and ewe lambs have moved as high as \$8. Most good black-faced feeding lambs have sold at \$7 to \$7.50, while large bands of white-faced lambs have brought \$6.75 to \$7. Good lambs moved at \$6.25 to \$7, unless selling in quality. Fresh lamb at wholesale has declined two cents as compared with last week.

Dull Cattle Trade

With some increase in cattle receipts there, but not in the combined total at the market, dullness has prevailed. Sales are a dollar lower for the

week. Top yearlings sold in the same notch as last week, at \$13.50, and top heavies brought only a dime less than last week, at \$12.50, but the average steer price at \$10.50 was 40 cents lower. It was the largest week of the year in the run of westerns, and feeder demand absorbed offerings at 25 to 50 cents decline in prices.

Not only is demand for beef limited but the hide market has dropped to the lowest point since before the war. Hide prices are now 6 cents below a year ago and 9 cents under two years ago. This is having an unfavorable effect in cattle raising.

Cattle receipts at Chicago for October totaled 240,000, largest since a year ago, but smallest for the month since 1915. Steer prices for the month averaged \$10.75, against \$10.90 in September, and \$9.55 in August. Five October averages have been lower since 1920. The October average in 1921 was down to \$8.10.

Chicago, Nov. 1, 1930 Watson

PENNSYLVANIA COMING EVENTS

Nov. 7-8.—Clinton County Farm Products Show, Lock Haven.
Nov. 8.—Bradford County Calf Club tour to Ticonderoga, N. Y.
Nov. 10.—Indiana County Four-H Potatoes Club banquet, Indiana.
Nov. 10.—Farm Products Show, Norris-town, Montgomery county.
Nov. 11-12.—Butcher and meat cutting demonstrations, Butler county.
Nov. 12.—Annual meeting of Wayne County Agricultural Extension Association, Aldenville.

Nov. 12.—Forestry thinning demonstration, Geo. Shaffer's farm, Jenner Cross Roads, Somerset county.
Nov. 12-14.—Agricultural and Industrial Exposition, Mt. Pleasant, Westmoreland county.
Nov. 13.—Dairy feeding and control of contagious abortion meetings, Butler county.
Nov. 12-13-14-15.—Third and last year of woodlot thinning campaign, Elk county.
Nov. 15.—Annual meeting, Bradford County Holstein Breeders' Association.
Nov. 17-18-19.—Elk County Farm Products Show.
Nov. 17.—Corn and Potato Club round-up, Carlisle, Cumberland county.
Nov. 18.—Annual meeting, Lake Ariel C. A. at Lake Ariel, Wayne county.
Nov. 18.—Corn Club round-up, Shippensburg, Cumberland county.
Nov. 18-19.—Home planting meetings, Butler county.
Nov. 19.—Montgomery Jersey Cattle Club meeting, Norristown.
Nov. 19.—Extension Association annual dinner, Indiana, Indiana county.
Nov. 19.—Annual meeting of Clearfield County Extension Association.
Nov. 20, 21, 22.—Meat cutting demonstration, Clearfield county.
Nov. 21.—Susquehanna County Agricultural Extension Association meeting, Gettysburg.
Nov. 21.—Bradford County Agricultural Extension Association meeting.
Nov. 21.—Dairy meetings, Perry county, Fronts Valley and Shermana.
Nov. 24.—Corn Club round-up, Mechanicsburg, Cumberland county.
Nov. 25.—Dairy meetings, Perry county, Laysville, New Bloomfield and Perry Valley.
Nov. 25.—McKean County Agricultural Susquehanna county.

Nov. 25.—Forestry thinning meetings, Extension Association meeting, Port Allegany.
Nov. 25.—McKean County Agricultural Susquehanna county.

LIVESTOCK

CATTLE

Monday's supply was about 60 carloads and included a large number of common stuff of all kinds. No choice fat steers were on sale, the good fat kind selling at \$8.50 to \$8.75, or about the same prices as last week. Parsley, Jersey, 10 to 12¢; CAILIFLOWER, 10 to 12¢; ENDIVE, 10 to 12¢; KALE, 10 to 12¢; LETTUCE, 10 to 12¢; PARSLEY, 10 to 12¢; PARSNIPS, 10 to 12¢; PUMPKINS, 10 to 12¢; PEPPERS, 10 to 12¢; RUTABAGAS, 10 to 12¢; SPINACH, 10 to 12¢; TURNIPS, 10 to 12¢; SWEET POTATOES, 10 to 12¢; MUSHROOMS, 10 to 12¢.

The common and only fat steers looked lower by a quarter or so, buyers not wanting them except at bargain prices. Good butcher steers brought \$8.50 to \$8.75, with fair kind around \$7.50, these carrying some flesh. Fair light steers went around \$7, those with less flesh or plain in quality \$6.50 to \$7. A few good heifers brought \$7.50, with fair kind \$6.50 to \$7 and others on down. Fat cows were dull, good aged cows selling at \$5 to \$5.50, a few nice young ones up to \$6. Medium class of cows sold slowly. Canners' steers largely at \$2.50 to 2.75, some fiesher kind \$3 or a little better. Bulls were very dull and lower, with \$8 the outside figure for butcher kind and others on down to \$1. Beef trade is unsatisfactory and killers are not in need of many cattle.

Choice grain-fed steers None here.
Choice steers \$8.75 to 9.00
Good butchers, 1,200 lbs. and over 8.50 to 8.75
Fair to good, do. 8.00 to 8.50
Plain heavy steers 7.50 to 8.00
Choice heavy weight steers 8.50 to 8.75
Good butchers steers, 1,000 to 1,150 lbs. 8.25 to 8.50
Fair to good, do. 7.75 to 8.25
Common to fair, do. 7.00 to 7.50
Good light butcher steers 7.25 to 7.50
Fair to good light steers 7.00 to 7.25
Common to medium, do. 6.00 to 7.00
Inferior light steers 5.00 to 5.25
Feeders Nominal
Stockers Nominal
Choice fat heifers 7.25 to 7.50
Good to choice heifers 6.75 to 7.25
Fair to good heifers 6.00 to 6.50
Common to fair heifers 5.00 to 6.00
Choice fat cows 5.00 to 5.50
Good to choice fat cows 4.50 to 5.00
Fair to good cows 4.00 to 4.50
Common to fair cows 3.50 to 4.00
Canners 2.50 to 3.00
Fresh cows, calf at side 50.00 to 60.00
Choice heavy bulls 2.50 to 6.00
Good heavy steers 9.00 to 10.00
Good to choice heifers 6.75 to 8.00
Common to medium 5.00 to 6.75
Fair to good bulls 5.00 to 6.75
Common to fair bulls 4.50 to 5.00
Inferior bulls 4.00 to 4.50

Monday's Representative Sales
No. Wt. Fr. No. Wt. Fr. No. Wt. Fr. No. Wt. Fr.
10 1370 8.75 10 1320 8.75 9 1255 8.75 11 1251 8.75
11 1251 8.75 8 1216 8.60 16 1129 8.50 10 1252 8.50
17 1138 8.50 12 1132 8.40 12 1341 8.25
5 1150 8.25 8 1151 8.25 3 1013 8.25 21 1031 8.25
6 1131 8.25 6 1131 8.25 5 1300 8.25 6 1230 8.00
7 1088 8.00 5 1050 8.00 4 1230 8.00
9 1031 8.00 4 1129 7.50 1 1032 7.50 15 942 7.50
19 1265 7.00 4 897 7.00 4 897 7.00
4 897 7.00 9 890 7.00 7 996 6.65 15 870 6.65
4 832 6.65 4 832 6.65 17 986 6.50 11 803 6.50
11 1013 6.25 4 1012 6.00

Hogs
Last week's market closed at \$9.35 for desirable hogs. Monday's supply was light and the quality generally good, running largely to 150 to 225-pound weights. The 25 double-cut carloads were quickly sold at an advance of 10 to 15¢ over last week's prices. Bulk of the hogs brought \$9.50, a few on the heavy under \$9.00. The best of

County Agricultural Extension Association, Aldenville.
Nov. 12.—Forestry thinning demonstration, Geo. Shaffer's farm, Jenner Cross Roads, Somerset county.
Nov. 12-14.—Agricultural and Industrial Exposition, Mt. Pleasant, Westmoreland county.
Nov. 13.—Dairy feeding and control of contagious abortion meetings, Butler county.
Nov. 12-13-14-15.—Third and last year of woodlot thinning campaign, Elk county.
Nov. 15.—Annual meeting, Bradford County Holstein Breeders' Association.
Nov. 17-18-19.—Elk County Farm Products Show.
Nov. 17.—Corn and Potato Club round-up, Carlisle, Cumberland county.
Nov. 18.—Annual meeting, Lake Ariel C. A. at Lake Ariel, Wayne county.
Nov. 18.—Corn Club round-up, Shippensburg, Cumberland county.
Nov. 18-19.—Home planting meetings, Butler county.
Nov. 19.—Montgomery Jersey Cattle Club meeting, Norristown.
Nov. 19.—Extension Association annual dinner, Indiana, Indiana county.
Nov. 19.—Annual meeting of Clearfield County Extension Association.
Nov. 20, 21, 22.—Meat cutting demonstration, Clearfield county.
Nov. 21.—Susquehanna County Agricultural Extension Association meeting, Gettysburg.
Nov. 21.—Bradford County Agricultural Extension Association meeting.
Nov. 21.—Dairy meetings, Perry county, Fronts Valley and Shermana.
Nov. 24.—Corn Club round-up, Mechanicsburg, Cumberland county.
Nov. 25.—Dairy meetings, Perry county, Laysville, New Bloomfield and Perry Valley.
Nov. 25.—McKean County Agricultural Susquehanna county.

Nov. 25.—Forestry thinning meetings, Extension Association meeting, Port Allegany.

MILK AND MONEY



flow in Kansas for
this Modern Farmer

This is the dairy herd of E. P. Miller, of Junction City, Kansas. He adds Dr. Hess Improved Stock Tonic to his ration to get extra production.



KANSAS is not all wheat. It has its livestock and its dairy herds. And it has Mr. E. P. Miller, of Junction City, Model Farmer, and leader of the state for the last two years with his 40 head of dairy cows. You'll be interested in his records for these two years and the reason why the second year's production is so much higher than the first.

In his first record year Mr. Miller had an average production per cow of 312 pounds of butter-fat — 8776 pounds of milk. In his second record year his production average jumped to 382.6 pounds of butter-fat — 10,577 pounds of milk! In other words, he had a cow-average of 70.6 pounds more butter-fat and 1801 pounds more milk in his second year. And his cost of production was 43 cents less a hundred! Why?

Mr. Miller's cows received the same feed and care both record years and both years the herd was pretty much alike in every way. There was one and only one outstanding difference in their treatment. He gave them Dr. Hess Improved Stock Tonic the second year instead of the mineral mixture they had been getting.

Observations made by Mr. Miller show that only one cow was off feed during the entire year on Tonic, while he had no less than twenty cases of this kind the year before. During the year on Tonic he had only one case of retained placenta, and this a first-calf heifer, while there were nine such cases the previous year.

Mr. Miller now adds Dr. Hess Improved Stock Tonic to his ration because he finds it pays a good profit. You can add dollars to your monthly milk check by following the example of this leading Kansas dairyman. See your local Dr. Hess dealer or write us, Dr. Hess & Clark, Inc., Ashland, Ohio.

Dr. Hess IMPROVED STOCK TONIC a conditioner and mineral supplement

Reach for ABSORBINE if horses' legs swell

Don't take chances on lay-ups. Rub effective Absorbine on muscles and tendons sore from heavy pulling. See how it reduces swellings due to strains. Never hinders or removes hair — and horse can work. A great antiseptic to aid quick healing. Keep horses earning — get Absorbine. \$2.50 a bottle. All druggists, W. F. Young, Inc., 354 Lyman St., Springfield, Mass.

Fistula & Poll Evil
Over 10,000 cases are successfully treated each year with our **MEDICINE No. 1 (FISTIFORM)**. No expensive surgery and no painful operation. One every 24 hours. Price \$2.50 a bottle postage paid. Write for our new VETERINARY ADVISER. Valuable for its information upon animal diseases. Or write us for any kind of veterinary advice. **FLEMING BROS., 9-353 Stock Yards, Chicago**

Empire Oil-Burning Tank Heater

Greatest improvement ever made in tank heaters. Fits any tank. Burns 14 to 16 hours on one gallon of kerosene. No sparks, ashes or smoke. Heating chamber entirely under water; no heat wasted. Guaranteed. Saves fuel costs for itself measurably.

EMPIRE NON-FREEZABLE HOG WATERER
Hogs gathered into 70 gal. capacity. Oil burner directly under trough — guaranteed not to freeze. Keeps water warm at all times. Keeps hogs healthy, fat and content.

FARMER AGENTS
wanted in every locality. Special offer to farmers willing to show Heater and Waterer to prospective buyers. Write at once for prices and special offer. Buy direct from factory.

EMPIRE TANK HEATER CO., 130 N. 7th St., Washington, Ia.

Defies Antarctic Cold With The Old Reliable

Brown's Beach Jacket

Byrd's Expedition was fitted out with them. Keeps out the cold and wind. Made to fit snugly without binding. Wears like iron, will not rip, ravel or tear, and the warm knit-in wool fleece lining gives ample protection on the coldest days. Three styles—coat with or without collar, and vest.

Ask your dealer
BROWN'S BEACH JACKET COMPANY
Worcester, Massachusetts

ADVERTISING reduces the cost of products that add pleasure and comfort to living.

Read through this paper carefully. You will find advertisements covering almost every human need. They are filled with hints for the household, hints for health, hints for clothing. Also large numbers of seed, poultry, stock food and implement advertisements. When answering them, mention Pennsylvania Farmer.

Shelter to Save Feed By A. A. BORLAND

THIS is the year when the dairyman should use his head as never before to bring his herd through the winter on the minimum roughage allowance. The corn crop is short and the hay crop less than in 1929. Fortunately, however, for feeding purposes there is available a larger crop of small grains than last year. There is also an excess of wheat. Hence an economical feeding program will call for the use of less roughage and more grain than usual.

The dairyman who has a silo will get the fullest value of the corn crop by converting it into silage. The man without a silo will lose a considerable portion of the feeding value of the uneaten cornstalks unless he shreds, cuts, or grinds the corn stover. More straw than usual will undoubtedly be fed this winter. Other feeds that may be used as substitutes for part of the hay are the hulls of the common grains, for instance, oat feed or buckwheat feed. Oat feed is made up of reground oat hulls and some of the oats shorts or middlings. Its digestible analysis is about the same as timothy hay. Buckwheat feed is made up of reground buckwheat hulls with shorts and middlings and is generally similar to timothy hay in analysis.

So Milk Will Be Clean

The new Pennsylvania law calling for sanitary inspection of dairy farms requires that "the cows shall be housed and cared for in such a manner that the milk will be clean." In order to meet this requirement the gutters should be of concrete. They should be deep enough to keep the manure from dropping on the platform beyond the gutter.

Feed may easily be wasted unless the manger is right. Concrete is a desirable material for manger construction, since when the corners are rounded it may easily be kept clean. The curb along the stanchion line should be six to eight inches high to prevent the cows from working the feed back under foot. The bottom of the manger should be one to two inches higher than the platform where

Proper Stabling

There is another phase of this roughage deficiency which is not so frequently thought of as a feeding problem. This is proper stabling. It sometimes happens that a considerable percentage of the ration brings the dairyman no returns because the cow has to utilize the energy value of the feed to warm her body, on account of a cold windy barn or an icy water supply. A further portion of the feed may be used up by the cow on account of nervousness occasioned by the discomfort of the stable in which she is housed. In fact, under average conditions a thousand-pound cow yielding 20 pounds of four per cent milk uses about one-half the heat value of her feed simply for the maintenance of her body and the work of digesting her food.

Dairy stables, therefore, should be so constructed that a temperature of from 50 to 60 degrees F. can be maintained without fouling the atmosphere. This means a tight stable wall with an efficient ventilating system.

A Ventilating System

The double flue system appears most satisfactory. A number of small intake flues about four or five by 16 inches and totalling four square feet of cross section flue surface for every 20 cows are built into the side walls of the stable, the lower end of each flue opening to the outside about four feet below the ceiling of the stable and the upper end opening into the stable near the ceiling.

The outtake flues, each about two feet square and providing a total amount of cross section flue surface equal to the intakes, are built reaching from the ceiling of the stable to a point above the highest part of the building. The flow of air through the flues is controlled by dampers. Windows so constructed that the upper sash of each will drop in at the top also assist in regulating the fresh air supply.

The problem of introducing sufficient light is sometimes difficult in an old bank barn. This may be solved by taking up the flooring of the hay-mow above the stable for a distance of about three feet from the side of the barn. Windows are then put above the stone wall and a sloping ceiling is built reaching from the top of the windows to a line on the hay-mow floor three feet out from the wall so as to form a chute through which light passes from the windows to the stable below. Four square feet of window glass per cow is considered a minimum allowance.

Proper stall dimensions and stable equipment are also important factors

the cows stand and the width preferably two feet six inches or more so as to prevent the cows from nosing out the feed. Manger partitions are desirable so that the cows may not rob each other. An iron rod connecting the manger partitions has the additional advantage of helping to keep the feed from being thrown out by the cows.

There are many kinds of ties, each having special advantages. Chain hung steel stanchions probably have the fewest objectionable features. They give the cow a moderate amount of freedom and are convenient and sanitary. They also have an alignment device by which they can be set forward or backward so as to line the cows up properly with the manger and gutter.

Another type of tie that is meeting with considerable favor is the double post and slip chain tie. Two posts are set up, one on each side of the cow. A chain tie is attached to each of these posts with a ring that slips up and down the posts. When this tie is used it is advisable to put a two-by-four-inch bar across the rear of the stall platform so that when the cow is standing her feet are back of the bar and the manure falls into the gutter. She learns to step forward when she lies down so that she does not rest on the bar and thus is prevented from becoming soiled.

Water cups are another item of stable equipment that may well have consideration as a means of saving the energy value of feeds. It takes food value to warm cold, icy drinking water.

Proper stable equipment, therefore, has a real place in conserving the feed supply. Moreover, a stable that is clean, safe, comfortable and convenient aids the dairyman in eliminating disease and accidents and in performing his daily tasks with the minimum expenditure of time and effort.



A light, tight and well-ventilated barn promotes cow comfort and makes feed go farther.

Cow-Testing Ass'n Reports

Grove City
THE Grove City (Mercer county) Cow-Testing Association finished its thirteenth year with 32 whole-year members and one part-year member. The total number of cows in the Association during all or part of the year was 455.

Twenty herds with five or more cows exceeded an average of 300 pounds of butterfat. Complete list follows:

Owner	Breed	Lbs. Milk	Lbs. Fat
J. Cooper	G.J.&G.H.	9456	418.9
B. Baker	R.J.	7153	408.9
A. M. King	R.J.	7491	394.4
George Stokely	R.G.&H.	7185	388.5
O. P. Home	R.G.&H.	11188	381.4
Paul Williams	R.G.&H.	7187	381.3
John Smith	G.G.	6813	366.2
John Smith	G.G.	7617	352.6
John Smith	R.G.&G.Mix.	7735	351.2
Al. Hahn	G.J.&G.H.	8654	349.1
John Smith	Mixed	9171	346.8
John Smith	R.G.&H.	9528	311.9
W. Worley	R.G.	6632	333.4
John Smith	R.J.	6381	331.8
John Smith	R.G.&J.Mixed	6575	328.1
John Smith	Mixed	8191	323.2
John Smith	R.G.&J.	6202	324.1
John Smith	G.J.&G.H.	7177	316.9
John Smith	R.J.	9139	310.8
John Smith	R.G.&J.G.G.	5919	309.1

W. S. Hagar, County Agent.

Northern Berks
THE Northern Berks County Cow-Testing Association finished its second year with 25 whole-year and two part-year members. There were 554 cows in the Association during all or part of the year. The results for the two years are as follows:

Twelve herds with an average of five cows or more exceeded in average production of 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Lbs. Milk	Lbs. Fat
W. J. O. G. George	R.H.	11231	371.2
Ray DeLong	R.G.	7321	319.4
Samuel A. Berker	R.G.&H.	9653	339.0
George Hamm	R.G.&H.	10482	335.8
Paul Kohler	R.G.&H.	9907	322.3
Harvey Merkel	R.H.	10371	323.4
David Moll	R.G.&H.	9240	323.4
Paul Wessner	R.G.&H.	9750	320.5
Elmer Stump	R.G.&H.	8743	311.9
John Kolbach	R.G.&H.	9172	313.6
Clarence Dietrich	R.G.&H.	9201	311.6
Earl Bond	R.G.&H.	8836	301.8

C. S. Adams, County Agent.

Samuel Ematat, Tester.

Don't Remodel— Build, Ventilate or Equip ANY FARM BUILDING UNTIL YOU

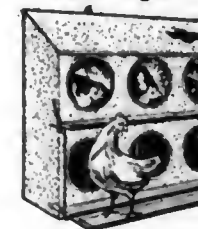


Before you REMODEL, Build, Ventilate, or Equip any farm building, fill out coupon below, tell us just what you are planning to do and we will send you books and literature which will show you how to do the job right—how to do it economically and in a way that will be most profitable for you.

Jamesway



Complete Equipment For All Farm Buildings



Mail coupon today to our office nearest you. We will gladly help you with any building or equipment problem. Books and literature free—no obligation.

Mail Coupon Today

Our many years of experience in planning and designing farm buildings enable us to show you how you can cut costs on material and construction—show you how every door, window and general arrangement should be to make your building most convenient and at the same time provide ideal health condition for your farm animals.

Send for our free books today—learn how we have helped thousands of farmers, dairymen and poultrymen to remodel their farm buildings so that the EXTRA profit from their stock soon paid for the small cost of making their buildings up-to-date.

These free books also show you how Jamesway labor saving equipment for the dairy barn, hog house and poultry house will save you hours of labor every day. Jamesway Equipment includes Stalls, Stanchions, Drinking Cups, Litter Carriers for the Dairy Barn, Troughs, Waterers, Incubators, Brooders and Heating Systems for Poultry Houses. Jamesway Equipment is the best and therefore the cheapest that you can buy.



Mail Coupon to Office Nearest You
JAMES MFG. CO., Dept. 6956
St. Atkinson, Wis. Elmira, N. Y. Minneapolis, Minn.
Jamesway Ltd., Toronto, Ont., Canada
Send me your New Jamesway Book. I am interested in:
☐ Building ☐ Remodeling ☐ Equipping ☐ Ventilating
☐ Cow Barn ☐ Horse Barn ☐ Tile Silo
☐ Hog House ☐ Poultry House ☐ Building Tile
I would also like information on: ☐ New Heating System
for Poultry House and literature ☐ New Pointed Arch Poultry House
☐ Dairy Barn Equipment ☐ Poultry Feed Equipment

Name _____
P. O. _____
R. F. D. _____ State _____

DAIRY CATTLE

For Sale 4 Pure-bred registered Guernsey cows, 11 months old, blood tested, 14 months from April and 14 months from Indiana on improved State Highway. Priced P.O.B. farm. W. L. GEORGE, Apollo, Pa.

Reg. Guernsey Bull, 3 1/2 yrs. old, gentle, quick, sure breeder, sired by grandson of No. 1111, out of granddaughter of King of the May. Also young bulls, one to twelve mos. old, from accredited herd. Jacob Shank, Hanover, Pa.

—REGISTERED GUERNSEY BULLS—
10 to 15 months old, Accredited Herd. S. W. Townsend, Cochranville, Pa.

—REGISTERED GUERNSEY HEIFERS—
Also Guernsey Bull ready for service, excellent breeding, herd accredited and blood tested. R. W. Hartenbach, Monaca, Pa.

AYRSHIRE CATTLE of the best blood lines. Herd T. B. tested. Animals of both sex and all ages. Geo. B. McConnell, Wellington, Ohio.

Registered Brown Swiss Bulls, three months old, herd T. B. tested. Write your needs. Reasonable prices. E. S. Golden, Penn Run, Pa.

SHEEP

REG. SHROPSHIRE AND SOUTHDOWN RAMS. Good individuals. They will please you. Won both championships on Shropshires at three state fairs this fall. Hylmide Farm, Beaver, Pa.

SHROPSHIRE AND OXFORD RAMS. Prices very reasonable. Satisfaction guaranteed. PIONEER STOCK FARM, Arcata, Ohio.

A few Southdown Rams For Sale Address W. U. NOBLE, Boston, Summit Co., Ohio.

HAMPSHIRE RAMS. A good 2-yr.-old, also a year and well grown Ram lambs Canadian bred. G. E. MATHAN, Cortland, Ohio.

HORSES

PERCHERON STALLIONS for sale, 4-yr. and 2-yr. grey, \$250.00 each, or would exchange for young horses or Ford cars. Write to W. A. RUD, Oxford, Chester Co., Pa.

PLEASE mention Pennsylvania Farmer when writing to our advertisers. They want to know and we want them to know that you read it all.

Chester White Pigs—6 weeks old, \$1.00. For breeding \$6.00 each. Mixed breed pigs, \$3.75. C. LEWIS TAYLOR, Wyalusing, Pa.

BIG TYPE CHESTER WHITES, spring gilts, born ready for service, immediate breeding possible. R. B. Heller, R. T. Bluffton, Ind.

125 BIG TYPE, pedigreed Chester Whites from big breeders and big litters. Bred right and shipped on approval. C. E. Cassel, Hershey, Pa.

BIG TYPE CHESTER WHITES—Grand champion blood, horns, open gilts and pigs. G. B. Ginter & Sons, R. 9, Carlisle, Pa.

Feeding Pigs, 15 to 50 lbs., \$4.50 to \$8.00 each. Big size. Truck delivery on large lots. Mostly Poland-Chinas. Stanley Short, Cheswold, Del.

SPOTTED POLAND-CHINA PIGS at \$15.00 each. Two tried yearling sows, bred, at \$50.00 each. One yearling boar at \$50.00. All extra good and shipped C.O.D. Guaranteed to please. A. J. Starkey, R. 2, Steubenville, Ohio.

PIONEER HERD—POLAND-CHINAS of approved blood lines. Service sows, bred sows, fall pigs. You will want a look in at this splendid herd. Satisfactory purchases in many states. Travel responsible. Address: C. S. Eppley, Zanesville, O.

Poland China Pigs (pedigreed big type, either Walter Kugler, Box 81040 each, Fairfield, Pa.

Reg. Spotted Poland-Chinas, fall pigs ready. Few bred gilts, bred sows and boars ready for service. A. M. Kennel, R. 2, Honey Brook, Pa.

O. I. C. Choice Sept. Pigs \$10 each. Pedigree furnished. Pairs and Trios not taken. Satisfaction guaranteed. C. B. Bell, Millersburg, Ohio.

LARGE BERKSHIRES all ages of usually for sale. Dilts & German, Resville, Ohio.

CATTLE

BUCK & DOE RUN VALLEY FARMS Herd of Cattle—Poland China Hogs—Hampshire Pigs—Horned Horses. THE SAINT ANTOUR COMPANY, Northville, Penna.

Angus Cattle at reasonable prices. Write BAYARD BROS., Waynesburg, Pa.

REGISTERED MILKING SHORTHORN BULL CALVES, 3 months to one year old, good ones, at farmers' prices. Inquire Sturgeon & McKeever, R. 3, Kittanning, Pa.

Crack Cows in U. S. Gov't herd jumped in milk yield after Conditioning...



**Even the Best Bred Cows
Need more than Good Food
Medicine and minerals prevent
Feed-waste, improve resistance**

A bountiful feed . . . and proper feed . . . is but part of the battle of dairying for profit. The maintenance of a healthy vigor sufficient to enable every cow to consume, digest and ASSIMILATE the maximum of roughage and concentrates . . . without waste, is the vital profit factor.

In every herd potentially great milkers are grafting their keep from the few real producers that are robust enough to carry on against the terrific strain of modern forcing for greater yields.

Kow-Kare wards off dairy losses . . . increases dairy profits . . . by providing the cow owner with an inexpensive and safe drug-and-mineral conditioner to stimulate the digestion and assimilation. With these key functions performing naturally, the maximum normal yield is made possible; disease and disorders are reduced by increasing the bodily health and resistance.

Kow-Kare is a scientific preparation of Iron, the great blood tonic, combined with potent drugs, roots, herbs and pharmaceutical minerals. Dosages for regular conditioning use are small and very inexpensive because Kow-Kare is concentrated and without "filler" to make bulk. Your milk check can be increased surprisingly by

regular Kow-Kare conditioning to elevate sub-normal cows to full normal yield.

At Calving time the milk-producing process and the urgent call for the nourishment of the growing unborn calf divert so much vitality from the mother that her own bodily functions are reduced in efficiency. Outside aid is especially required at this critical period. Kow-Kare supplies this acutely-needed support in stimulating the appetite and aids most if fed regularly with the ration for a few weeks before and after calf-birth.

Sold by feed, drug, hardware and general stores. 84.25 and 65¢ sizes. Mailed post-paid if your dealer is not supplied.

Dairy Association Co., Inc.
Lyndonville, Vermont



KOW-KARE

**The concentrated . . .
open-formula conditioner**

Warning—Do not make the mistake of choosing a conditioner or "tonic" for bulk or low price. This concentrated product of established reputation will provide greater medicinal action at lower cost and save time and disappointment.

says Dr. Woodward



At the Government Dairy Experimental Farm at Beltsville, Md., where supervision is exceptionally close and each cow's rations are mixed according to a special formula, it was found that some individuals were unable to maintain their natural level of production, particularly in winter and early spring. Something besides feed was needed and this seemed to be supplied when they were treated with a prescription giving them special appetizers, tonics, laxatives and minerals that may have been deficient in their feed.

The effects of this treatment was the stimulating of the cow to eat a larger amount of feed, increase the flow of digestive juices and the drinking of more water. This could only mean one thing . . . increase of milk yield to the normal maximum, with the off-condition cows returned into the profitable class where they belonged.

B. T. Woodward
V. M. D.

Send for **FREE Cow Book**

Dairy Association Co.,
Dept. 24, Lyndonville, Vt.

Please send me your 36-page illustrated book on cow ailments for my guidance in treating diseases and disorders.

Name _____

Address _____

PENNSYLVANIA FARMER

Published
Weekly






Established
1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

November 15, 1930

**GRAND
CHAMPIONS**

**NATIONAL
DAIRY
SHOW**

Philadelphia

Pittsburgh

Harrisburg

Farm Facts and Fancies

By ALVA AGEE

As a profit maker, scientific nutritional balance is just as important as the best ingredients that always go into Park & Pollard feeds.

That's why it pays to feed Park & Pollard dairy and poultry feeds.

Complete list of Park & Pollard Feeds

Poultry Feeds: Lay or Bust Dry Mash · Red Ribbon Scratch · Growing Feed · Intermediate Chick Feed · P & P Chick Scratch · P & P Chick Starter—Dairy Rations: Overall 24% · Milk-Maid 24% · Bet-R-Milk 20% · Herd Health 16% · Milkade Calf Meal—Other Feeds: P & P Stock Feed · Bison Stock Feed · Go-Tu-It Pig and Hog Ration · Pigeon Feed · P & P Horse Feed · Pocahontas Table Corn Meal.

WHEN some of our high authorities in finance turn to discussion of agricultural problems they do not impress us because they reveal the fact that they do not understand. Then comes some one who does give us something to think about. Such a one recently raised the question whether our big wheat and cotton "farmers" can rightly be classified as farmers for whom relief should be expected. He says they "live solely or mainly by producing something which they must sell in markets over which neither they nor this country as a whole can exercise much influence save at rare intervals. And in their case the only relief which can be effective is for their fellow citizens to support them by shouldering the loss when the world's markets go against them."

The conclusion of this writer I give for whatever it may be worth. He says: "The solution seems equally clear and that is more farmers and fewer mere wheat and cotton raisers. More farmers who feed themselves and their families with their own products. More farmers who look on farming as a way of life rather than as a business or an industry." It seems to me that this man is half right, and that is nearer right than many of our critics. I dare to say that he would be regarded as ninety-five per cent right by the large organization known as Owners of Home-ly Farms.

Consumer Credit

Our former President has urged people who could afford to buy to do so freely so that demand would be created for more goods and unemployment would cease cutting down the nation's buying power so badly. The head of a great chain store system has suggested to President Hoover that if every family would buy one hundred dollars of goods on an extended payment plan surplus manufactures would be exhausted and industry would go ahead. Many cities are trying campaigns of "Buy Now" to get business back to the humming stage.

We had an orgy of buying on the extended payment plan, and are suffering the results. I have been told that a big drink of whiskey in the "morning after" often serves to put a man on his feet. Maybe so, but it seems to me strictly bad business for any individual to go into debt in an effort to make business good.

Elderly Folks at Play

America's western coast presents one unusual social feature. Scores of thousands of people have left the central and eastern states and made Southern California their home. The warmth and sunshine attracted them when some ill-health or advancing years brought dread of cold and the changeable weather of the East for some member of the family.

Thousands lacked inclination to go into any business and many lacked physical ability to do much hard work. They bought or rented homes in the cities and towns near the coast, and very easily they come to the lack of recreation. The man who knows how to depend on his own resources gets along quite well, but probably a majority of folks do not know. All this brought about the provision of facilities for thousands who want plain, every-day play. They have done their work elsewhere—little or much—and now want a substitute.

A More Capable Element

"In the picture," as the social student expresses it, is a great host of very wealthy people who have built their homes at attractive points along the coast, and know how to use their large incomes in entertaining themselves. There are thousands of them. They there are people of considerable

capital who have put their money into groves and orchards, for good or ill, and are busy enough trying to realize some part of what the sellers pictured to them.

A still larger number bought so-called "ranches" of one to ten acres and undertook the production of poultry, fruit, etc., and they find plenty to do. Some make a living or more, and some come short of it. The rich can have their yachts, polo, golf and all manner of diversions, the people on the ranches work, and there remain the still larger number who could miss three days out of the week without subtracting at all from their accomplishment.

Revenue Producers

Every city and town is interested in all these people. They bring some capital to invest, spend income for necessities and luxuries, and help pay taxes. Daily they make their contribution, and they attract others from back home. Another big source of revenue is the money of tourists who may stay a week, a month or all winter. There is competition for these folks. Personally I think that those who come get their money's worth excepting always those who come for a permanent home and fail to wait a few years for seasoning before buying property. The effort to attract is simply good business.

A Minor Feature

Especially interesting is the provision made by cities and towns for the amusement of residents and tourists of limited income. In one corner of a city park is a club-house that is headquarters for a club of several hundred members, and around it are concrete courts for horse-shoe pitch, many shuffle-boards, tables for chess, checkers, cards and other games, and out in the sunshine are shade, day after day, a great company comes for its recreation.

At another point in the park are seven roque courts, costing hundreds of dollars each, croquet courts, chess, checkers and dominoes, and seats for those wanting to watch games. At another point in the park is a city golf course. All this is supplemented by facilities provided solely at club expenses.

I reckon that nine men out of ten who spend their later years on their own farms get more solid satisfaction out of life, but a lot of these wanderers manage to have a pretty good time. What do their wives do? Oh, they haven't retired.

On the Cover

THE grand champion bulls of the five breeds exhibited at the 1930 National Dairy Exposition are shown on our cover this week. At the top is March Molly's 3rd Master, Brown Swiss, shown by J. P. Allyn, Delaware, Wis. The Jersey below him is February Fern's Noble, shown by Two Oaks Farm, Morristown, N. J. The Holstein is Sir Fobes Ormsby Herd, owned by Elmwood Farm, Deerfield, Ill. This is the fifth time he has been made grand champion at the event. The Ayrshire, lower left, is Willoxton Satisfaction, owned by Alta Crest Farm, Spencer, Mass. The lower right is Fern Brook King Herd, Guernsey, shown by Geo. M. White, Coxsack, N. Y.

Who Can Beat It?

I HAVE read in your paper about big eggs. I don't have the big eggs but I have a Blue Hubbard square that weighs 20½ pounds. I would like to hear from some one who can do better for this dry season.

Mrs. Jesse Verner.

Washington county, Pa.

Farm Practice

By W. D. ZINN

WEBSTER defines a fanatic as "a person affected by excessive enthusiasm, particularly on religious subjects; one who indulges wild and extravagant notions; a visionary zealot."

By some Martin Luther was called a fanatic, a religious zealot; but did this in any way lessen his ability for doing good? On the contrary these very epithets against him gave him a more extensive reputation and aided him in the performance of the great work he started out to do. He was arrested and placed in jail, but during his stay there he translated the Bible.

While John Wesley may never have been called a fanatic, history tells that some said he was over zealous in the cause he represented, but who will attempt to say that his over-zealousness was not the means of bringing about great good to the world? It may truly be said his zeal founded the great Methodist church.

Columbus was ridiculed and no doubt was called a fanatic when he insisted that there was a western hemisphere. He too was put in jail and maltreated. He was a great leader, but most of his followers were blind.

All down through the ages we have had over-zealous men and women who have been called fanatics but who became public benefactors on account of singleness of purpose. I am now reminded of one who thirty years ago was nicknamed fanatic and about whom many mean things were said because of his attitude on the temperance question. Many of my older readers could guess to whom I refer. He was all the more despised by the liquor people because of his great ability as an orator. I refer to the late Thomas Carskadon, familiarly known as Uncle Tom, of Mineral county, W. Va. Since prohibition has been established in our country I have greatly regretted that Uncle Tom could not have lived to see the fruitage of his labor. I have heard Uncle Tom called an old fanatical crank, but who will dare say that he was not one of our great benefactors?

Stable Manure

A CORRESPONDENT asks how many tons of stable manure will be required to fertilize an acre of potato ground properly. The answer to this question depends largely on the present condition of the soil. Ten tons would be ample for some soils, while twenty tons would be none too much for much of our land. Since there is little danger of putting too much on I would suggest that our correspondent apply twenty tons; but he will make a mistake if he stops with the manure. Both the manure and the soil are likely to be short of phosphorus, and the potatoes need this element. A half ton of superphosphate per acre will be none too much to insure a good crop of potatoes.

Wheat for Corn

A SUBSCRIBER writes: "Will it pay me to exchange wheat for corn, bushel for bushel, to feed cows?" Certainly not. A ton of wheat contains 400 pounds more nutrients than a ton of corn. Besides the kind of nutrients found in the wheat is better adapted for the production of milk than those found in corn. In other words, the wheat contains a large percentage of protein, while corn contains less, and it takes protein to produce milk.

Many farmers exchange wheat for corn, which is another mistake. If the bran costs more than \$26 per ton and the wheat is not over \$1 per bushel better feed the wheat. Wheat makes an ideal ration for calves, cows and sheep. We often say there is nothing better to feed fattening cattle than corn, but if corn is fed it might pay to exchange some wheat for oil or cottonseed meal.

GUILTY!

Let the MAYTAG free you from this thief of time and happiness

THOUSANDS of farm women everywhere have routed that thief of time and happiness—the old-fashioned washboard. They have found that there is no economy in rubbing or boiling the life out of clothes. The Maytag washes everything clean without hand-rubbing, without boiling.

The gentle Maytag method makes the clothes last longer and saves your health and strength. It costs less to own a Maytag because it is easier on the clothes and because of its lifetime construction. It washes faster and cleaner because of its one-piece, cast-aluminum tub and its new-type roller water remover.



The Power Meat Grinder Attachment



The Power Churn Attachment

The Gasoline Multi-Motor

This time-tested engine known to farm homes over sixteen years, brings Maytag convenience to homes without electric current. A step on the pedal starts it. By removing only four bolts, it is interchangeable with the electric motor.

A Free Trial Washing

Phone the nearest dealer for a trial home washing with the Maytag. If it doesn't sell itself, don't keep it. Divided payments you'll never miss.

THE MAYTAG COMPANY

Founded 1893 :: NEWTON, IOWA
Permanent Philadelphia Factory Branch,
Maytag Bldg., 851-3 North Broad St.,
Philadelphia, Pa.

The Maytag Aluminum Washer
IT DOESN'T SELL ITSELF. DON'T KEEP IT.



For homes with electricity the Maytag washer is available with electric motor.



The Maytag Ironer

An answer to thousands of Maytag owners who have said: "Give us an electric ironer as good as the Maytag washer." Irons everything beautifully in much less time and without the tedious effort of hand ironing.

F-11-30

TUNE IN
ON MAYTAG
RADIO
PROGRAMS

Over N.B.C. Coast to Coast Network
Monday Evenings 9:00 E.S.T., 8:00
C.S.T., 7:00 M.T., 6:00 P.T.—WJZ,
New York; KDKA, Pittsburgh; KYW,
Chicago; KSTP, St. Paul; WSM, Nash-
ville; WREN, Kansas City; KOA,
Denver; KSL, Salt Lake City; WKY,
Oklahoma City; KPRC, Houston;
WFAA, Dallas; KECA, Los Angeles;
KGW, Portland and Associated
Stations.

EDWARDS METAL ROOFING
PROTECT and beautify your home and barns with EDWARDS Metal Roofs and your roofing troubles will be over for good. Weather-proof, fire-proof, lightning-proof, wind-proof, they last as long as the buildings. Cost you much less because we control every thing from the raw material to the finished roof and sell direct to you at factory prices.
BEAUTIFUL—PERMANENT—ECONOMICAL
Painted or galvanized steel or enameled rust-resisting copper-bearing steel. Styles for all purposes. Shingles (individual or in clusters) or Spanish Tile. Sheets (plain or corrugated, standing seam, or re-ridged).
Write for Free Samples and Factory Prices. Amazingly low cost. Easy to apply. Fully guaranteed. Thousands of satisfied customers are our best advertisement. Ask for Building Book No. 1931.
We Pay the Freight
The Edwards Manufacturing Company
11941-11991 Butler St., Cincinnati, Ohio

LOWEST PRICES IN OUR HISTORY
CASH or your own TERMS
My new low prices are the sensation of the engine world. You can now buy one of the world's finest engines at the price you would usually pay for an "ordinary" engine.
DIRECT FROM FACTORY—TO—YOU
My latest engines are the finest ever built. Enclosed—Self Oiling with Timken Roller Bearings that never require adjustment guaranteed for the life of the engine. Also Pumps and Sawing Outfits. **SAVE** the dealer's profit—**SAVE** the expenses and salaries of traveling salesmen—and **SAVE** the usual "extras" added to the selling price. Remember: you **SAVE \$20 to \$200** when you buy from WITTE.
FREE ENGINE BOOK AND CHART
Write today for my new ENGINE BOOK and CHART. I'll send you my new ENGINE BOOK and CHART FREE. Prices now lower than ever before.
WITTE ENGINE WORKS
2011 Oakland Ave., Kansas City, Mo.
TIME TESTED SINCE 1870

Est. 1833—Inc. 1889
RAW FURS
More PROFITS from your FURS
Make your fur season more profitable this year by shipping to Traugott Schmidt & Sons, a company with a 75-year record of fair dealing in the fur trade. No sliding scale of prices, but exact quotations based on liberal gradings. And we pay the price we quote! Write for fur price list and special offer to shippers.
TRAUGOTT SCHMIDT & SONS
504 Monroe Ave., Detroit, Mich.

Please Mention Pennsylvania Farmer When Writing to Advertisers

The Worst Drought in 50 Years

has done strange things to the values of FARM SEEDS. Some kinds are much higher and will be higher still, while others are lower than a year ago. Get the Truth, the whole Truth, and nothing but the Truth before you buy. We quote

100,000 Bushels Dibble's Farm Seeds

The Highest Grade Obtainable for March or April Shipment as follows

Verified Origin	Per Bushel
Montana-Idaho Alfalfa	99.50% Pure, \$16.50
Montana-Idaho Grimm	99.50% Pure, \$20.10
Red Medium Clover	99.50% Pure, \$18.50
Mammoth Red Clover	99.50% Pure, \$18.50
Flancy Alsike Clover	99.50% Pure, \$18.50
Timothy	99.50% Pure, \$ 5.00
Timothy-Alsike Natural Mix- ture, over 20% Alsike	\$ 6.00
Heavyweight and Twentieth Century 40-lb. Seed Oats as low as	\$.80
Alpha Two-Rowed Barley	\$ 1.25
Oderbrucker Six-Rowed Barley	\$ 1.10
Marquis Spring Wheat	\$ 1.50
Canada Field Peas, 100% Pur- ity, Germination 98% and disease free	\$ 2.75
Seed Corn, 10 varieties, every bushel Northern grown, for husking crop or the silo, tested, and germination of 90% or better guaranteed, as low as	\$ 2.25
and none higher than	\$ 3.00
Dibble's Officially Certified Seed Potatoes as low as, per sack	\$ 5.00
Bags FREE of course.	

Prices subject to change without notice.

If interested in ordering your Farm Seeds NOW for delivery next Spring, send for Complete Price List and the Truth about the Farm Seed Situation. Clip the coupon or a Postal Card will do.

Edward F. Dibble Seedgrower,
Box F, Honeoye Falls, N. Y.
Gentlemen:
Send me latest Price List and the Plain Truth about the Farm Seed Situation.

Name
Address
State

10c brings you poultry ideas for 7 months

Think of it! Only 10c for 7 issues of the poultry magazine that "gives the most help toward more poultry profits" — has "the most ideas per square inch". Written by poultrymen, for poultrymen.

No matter how many birds you have, Poultry Item can help you make more money. It can help you have more eggs when eggs are high. Next seven issues give 7 "secrets" of greater poultry profits.

Try it for 7 months! Send 10c (stamps or coin). Satisfaction guaranteed. After you've read it, you'll want Poultry Item always. Use the coupon below.

The POULTRY ITEM

The Poultry Item,
Sellersville, Pa.
Enclosed is 10c. Send me Poultry Item with the seven "Secrets" articles.

Name
Address

500 MEN WANTED To sell high grade nursery stock. Part Commission paid promptly. Reasonable price paid for stock. See us at the Home Nurseries, 1001 Genoa, Ohio.

NESHAMINY GARDENS

By R. P. KESTER

SOME weeks ago I mentioned here that a man who had read my reference to "water witching" had telephoned me to come and find water for him. I related the fact that, in a moment of weakness, I had gone and was awaiting word as to the results. My friend Howard Mitman of Northampton county read this, and here is a quotation from an otherwise good letter:

"Gosh-all-hemlock! So that is the kind of critter I have been consorting with, more or less, for 10, these many years! A Water Witcher!! Nothing but caps will do for that! On a memorable occasion, or several occasions, one of old declared there was nothing new under the sun, and he must have had these modern days in mind when he said it.
A man who formerly worked for me and is now dead (no connection between those two facts) was very successful in locating water in that way. However, he did nothing so amateurish as totting a forked twig. He was a past-master of the game. His method was, as he told me, to put his head in a bag, walk slowly over the territory he wished to locate with a pump, until a blinding flash of light came to his bagged eyes. There he stood fast, marked the spot with a peg, and straightway began to dig a well. He was very successful and found a good stream at no greater depth than his neighbors had to go."

That doesn't sound so bad until you note the sarcasm in the last sentence. Just as I was reading this letter, the telephone rang and I found the caller to be the man to whose place I had gone two weeks ago to locate a well. He was so jubilant he could scarcely tell the news, the news being that he had found water—a big stream, testing eleven gallons a minute right in the driest season ever known! This news took the sting out of Howard's letter completely.

P. S.—Now, don't let any one tempt me again. I want to quit while my reputation is riding high.

From Adams county a woman writes a most interesting letter, and because it is so suggestive I pass it on, hoping it may lead others to take up the work she suggests.

"Dear Mr. Kester:—Sometime ago mention was made in your 'Neshaminy Garden' notes about keeping the boys on the farm. For years I have had the same thing run through my mind without a solution until I read Gene Stratton Porter's book, 'Michael O'Halloran'. On pages 421 to 424 of Chapter 17 is given the real solution of the problem. Those few pages are worth many dollars to any one concerned about our boys and girls of the farm, or our homes and children."

"It covers the habit so many people have formed of running to the cities and towns and taking their children, until the children are trained to think that all pleasures are in town, and are never satisfied until they are in the city. If you would read this book and grasp her thought of beautifying homes, arranging games, recreations, etc., then use your column in the winter months, you might convert many farmers from maintaining a colorless life and save some sons and daughters for homes on the farms."

I have read Michael O'Halloran and gained many ideas, besides being highly entertained. The book is well worth reading, as are all of Gene Stratton Porter's.

Social life in America has undergone such radical changes during the last twenty years that it is difficult for one born and raised in a different period to assume to lead, or even advise, young people of today in the matter of play and recreation. Of one thing I am sure: Recreational habits and customs today are less simple but cost infinitely more than those of former generations. And of another thing I am sure: The young people of today do not have any more fun than did we of an older period.

After all, elaborate plans and ex-

penditures do not insure enjoyment. Happiness is spontaneous—often arising from the unexpected happenings of life. I was watching some of my grandchildren at their play just today. They were using only simple, everyday things but these, plus their imaginations, made them supremely happy.

This age has produced a class of public entertainers and entertainment with high-powered salesmanship back of them which, through advertising, has been "sold" to the public, so that the public has become convinced that, if it will but pay out its money, it may have entertainment and happiness. Most such high-class and high-priced sources of entertainment are in the towns and cities, hence "we, the people," flock there to get what all the world's a-seeking—happiness.

But it is not working out. I am sure that the time is not far off when the hectic kind of entertainment the world is seeking now will pall on the seekers.

I am in accord with the idea, however, of working on a plan to revive a more independent spirit in the hearts of country people, a spirit which will cause them to revolt against the present state of dependency on "professional" amusement makers. The coming winter would be a good time to revive the old-fashioned, country neighborhood gatherings.

Friendly Talks

By
Edgar L.
Vincent

KEEP out of the courts if you possibly can.

This would be my counsel to every farmer if I could write it high up on the clouds where it could be seen the world over. A lawsuit surely is a calamity; and yet some men seem to delight in being all the time in a fuss of some kind with their neighbors.

One old fellow I know never seems to be happy unless he has a lawsuit on hand, and if he cannot get up a controversy with anybody else he will tackle his own boys, and usually for the most insignificant things. And everybody who knows him is afraid of him; they do not know what minute he may try to get-up a rumpus with them.

We ourselves are at fault in this respect sometimes. I remember many years ago, when I was a "month-hand" for a farmer who was away from home a good share of the time in the fall running a threshing machine, how the man who owned a big farm on the north side of the place where I worked took me out to look at a line fence which he claimed was my employer's part to keep up. Straddling the rail fence in one place he measured the distance between his body down to the top rail. "Plenty of room for play!" he indignantly declared, and he denounced my employer for not keeping up his fence, thus making cows unruly. Boy that I was, I was half scared to death by the man's tones.

Now, that is one way we may keep on good terms with our neighbors. Good line fences do not provoke lawsuits. We can all think of other ways we may take to maintain a friendly attitude toward others. Good neighbors are always fair and square with others. They are ready to do a good turn whenever they can. They gladly go the second mile if by so doing they can win the favor of the man who wants to take the coat off their backs.



BODYGARD

THE freezing blasts of winter hold no terrors for the wearer of BODYGARD Underwear.

A weight and style for every weather, every purpose, and every member of the family.

Comfort and protection priced for today's true economy... Ask your dealer for BODYGARD Underwear.

UTICA KNITTING CO. NEW YORK

Springlex
A fine ribbed garment with springy texture.

VELLASTIC UNDERWEAR
Elastic knit fabric with a silky inner fleece.

Also U. K. C. Sleeper Suits for your children. Ask to see them, too.



DIAMOND



DRIVE CALKS

DIAMOND Drive Calk Shoes fit the average horse's hoof without alteration, or can be reshaped hot or cold.
DIAMOND Drive Calks are made from high carbon steel, hardened to give long wear. Guaranteed to fit shoe perfectly. Easily and quickly removed and replaced without resetting shoe. Give horses excellent footing when hard work is required. Ask your Blacksmith or Dealer for Diamond Shoes and Calks. If he cannot supply you write for Illustrated Catalog to

Diamond Calk Horseshoe Company
4610 Grand Ave. Duluth, Minn.

To know what to buy—read the advertisements. They will keep you informed of the latest and best products of the manufacturers. Their aim is to meet your needs. You will find that time spent in reading the advertisements is time well spent. Read them regularly, with care, and when answering, mention Pennsylvania Farmer.

MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER
Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of March 3, 1879.

President - - - Arthur Capper
Vice-President - - T. D. Harman
Vice-President - George M. Slocum
Editor-in-Chief - - E. S. Bayard
Manager - - - Neff Laing

New York - - - 420 Lexington Ave.
Chicago - - - 203 No. Wabash Ave.
Detroit - - - 1632 W. Lafayette Blvd.
Philadelphia - - 1201 Chestnut St.
Cleveland - - - 1011 Rockwell Ave.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., November 15, 1930

No. 20

Pioneers in Agricultural Engineering

By GEO. F. JOHNSON

WHEN we read of the Battle of Bunker Hill, of Washington crossing the Delaware, and of other heroic deeds during revolutionary days, we are inclined to overlook those thousands of courageous farm women, boys and girls and aged men who toiled almost day and night for several hazardous years with their spinning wheels, oxen and wooden plows, wooden harrows, sickles and flails, in order to properly feed and clothe the army.

Modern farm machinery dates from this Revolutionary period. For the first hundred years of settlement, the land in Pennsylvania was broken either with a hoe or a wooden plow. The plows used during the colonial period resembled, in almost every respect, those represented in the Scriptures or on ruined temples of ancient Egypt and, like those, were drawn by oxen. The entire implement was made of wood, the mould-board being a heavy block, sometimes covered with a piece of iron or the skin of a gar-fish. The beams on these wooden plows were, of necessity, so low that the plow became easily choked with grass or manure so that a boy had to walk by the side of the implement to keep it clear of rubbish.

The lack of an implement that would stir the soil to a satisfactory depth for corn and other field crops, undoubtedly, was an important factor in the rapid settlement of practically all important agricultural areas of Pennsylvania, by the end of the eighteenth century. An early historical record indicates that one of the reasons why farmers in the extreme southeastern Pennsylvania counties desired "to go west into Lancaster county and the backwoods was because the unbroken ground was so thick that if tickled with a hoe it yielded an abundant harvest."

The part played by the pioneer agricultural engineers of Pennsylvania in the development of the metal plow and other important farm machinery, is a contribution not only to the agriculture of America, but to the progress of civilization throughout the world. To fully comprehend this development it is necessary to explain that Pennsylvania, in addition to being the leading agricultural colony, was also the leading colony in the iron and steel industry.

When roads were made the demand for hauling between cities and towns created a great demand for wagons.
The period from 1750 to 1830 might be termed a "wagon age." Many farmers had teams on the road all winter hauling merchandise to and from Philadelphia. The teams consisted of either five or six heavy horses, well fed, curried, wearing good harness and sometimes adorned with bells.
Wagons were probably the most perfect mechanical construction of the time. They were masterpieces of work. The wheelwrights and blacksmiths expended their utmost skill and good taste in this effort. The wagons were built staunch and strong, but by no means clumsy when compared to other mechanical devices of the time. Usually the body of the wagon was painted blue and the wheels red. A covering of stout white linen or hempen material, drawn tight over shapen bows, was fitted to the body so as to be lower near the middle and projecting like a bonnet at the front and at the rear. These were popularly known as Conestoga wagons, the forerunners of the "covered wagons," made famous during the middle of the nineteenth century. These Conestoga wagons marked an immense change in the life of the people and played no small part, as we all know, in the westward march of the Anglo-Saxon colonization.

The blacksmiths and wheelwrights, schooled during the Conestoga-wagon days in southeastern Pennsylvania and in bordering counties of other states, were the real pioneers in modern farm machinery. All the reasons why many of these men turned their attention to farm machinery between 1810 and 1830 are not obvious. One reason, undoubtedly, was the fact that canals had replaced many long distance wagon routes, so that there was less demand for the construction and repairing of wagons. Turning, therefore, to a new field of endeavor they began to devise various mechanical contrivances for lightening human labor in farm operations. One of the first implements to engage their attention was the plow.

While English historical records claim that James Small of Scotland invented the cast iron mould-board plow, having a wrought iron shire, in 1785, it is reported that William Ashmead of Germantown, Pennsylvania, had previously made plows with a wrought iron mould. In fact the famous Frenchman, Lafayette, purchased four of these plows for his estate. Later Charles Newbold of New Jersey developed a cast iron plow for which he received a patent. It is said that he spent \$30,000 in attempting to get farmers to adopt it, but failed because many were of the opinion that cast iron poisoned the soil.

One of the outstanding pioneers in the successful commercial development of the metal plow was Joseph Smith, a blacksmith of Bucks county. After years of study and observation on the correct shape of a mould-board, Smith whittled out a model for a metal plow and secured a patent, May 19, 1800. He entered into agreement with a Philadelphia firm and in a few years this firm was making the cast iron mould-boards at the rate of 1,200 annually. There is nothing that illustrates better the complete revolution in farming methods due to machinery than the evolution of the sickle into the twentieth century combine. The sickle was the only means for harvesting grain in Pennsylvania until early in the nineteenth century. The cradle was then introduced, but many farmers predicted that it would never come into general use. However, it was used quite generally until after the middle of the nineteenth century. About 1850 "reaping machines" were introduced. One of the first machines of this kind, large and cumbersome, was used by James Moore in Chester county in 1855.

In colonial times the grain after being cut was hauled on sleds to stacks where temporary threshing floors were erected, or else taken direct to the barn where the barn floor was used. On the outside threshing floor the work was usually done by horses which were driven round and round on the platform. In the barn the threshing was done by flail. It is said that on still days the thump, thump, thump of oxen breakers on the floor could be heard throughout



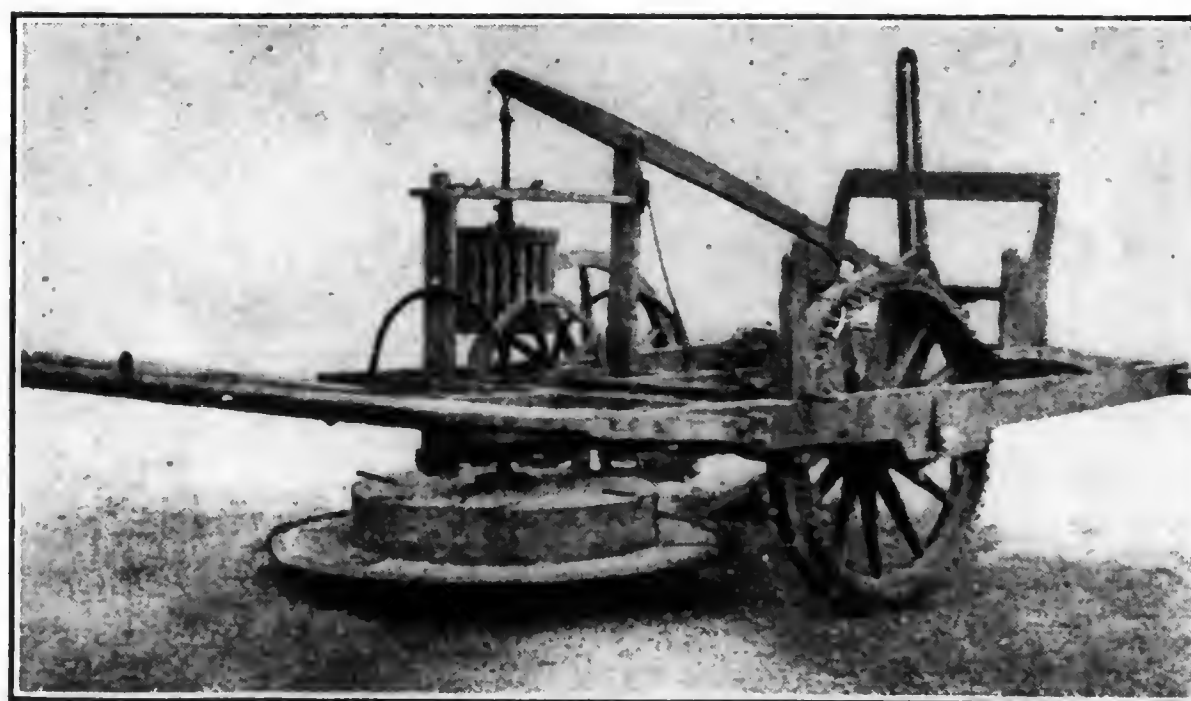
The wooden mould-board plow, shown above, was superseded early in the 19th century by wrought-iron and cast-iron mould-boards. The two plows illustrated on this page are in the museum of the Bucks County Historical Society.

engage their attention was the plow.

One of the outstanding pioneers in the successful commercial development of the metal plow was Joseph Smith, a blacksmith of Bucks county. After years of study and observation on the correct shape of a mould-board, Smith whittled out a model for a metal plow and secured a patent, May 19, 1800. He entered into agreement with a Philadelphia firm and in a few years this firm was making the cast iron mould-boards at the rate of 1,200 annually. There is nothing that illustrates better the complete revolution in farming methods due to machinery than the evolution of the sickle into the twentieth century combine. The sickle was the only means for harvesting grain in Pennsylvania until early in the nineteenth century. The cradle was then introduced, but many farmers predicted that it would never come into general use. However, it was used quite generally until after the middle of the nineteenth century. About 1850 "reaping machines" were introduced. One of the first machines of this kind, large and cumbersome, was used by James Moore in Chester county in 1855.

In colonial times the grain after being cut was hauled on sleds to stacks where temporary threshing floors were erected, or else taken direct to the barn where the barn floor was used. On the outside threshing floor the work was usually done by horses which were driven round and round on the platform. In the barn the threshing was done by flail. It is said that on still days the thump, thump, thump of oxen breakers on the floor could be heard throughout

(Continued on page 26.)



Mowing machine made by Jeremiah Bally in Chester county, patented February 13, 1822.

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
T. D. HARMAN, Vice-President
GEORGE M. SLOCUM, Vice-President
NEFF LAING, Manager

EDITORIAL STAFF
E. S. BAYARD, Editor-in-Chief
C. L. WHITE, Editor
MILES HOUST, Field Editor
M. C. GILPIN, Editor
G. W. HARRIS, Field Editor

Editorial Offices: PITTSBURGH, HARRISBURG, PHILADELPHIA
Contributing Editors: R. T. Kester, Alva Agas, L. W. Lighty, W. D. Zinn,
R. U. Blasingame, J. F. Shigley, F. L. Bentley, J. G. Lipman,
B. W. Fletcher, H. C. Knaedel, A. A. Borland,
R. L. Scharring-Hausen, Gilbert S. Watts
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for livestock and classified advertising. No deceptive, immoral or swindling advertisement inserted at any price.

Member Agricultural Publishers' Association.
Audit Bureau of Circulations

Volume 103, No. 20 Established 1877

WHEAT ESTIMATES

ACCORDING to the bulletin of the Millers' National Federation statisticians are revising upward their estimates of the amount of wheat to be fed. Two months ago they were figuring on 60 to 70 million bushels, but now 160 to 180 million bushels, and a few as high as 250 million bushels. Our early guess of 150 to 200 million bushels doesn't look so high now as it was considered then.

NOT CONSERVATIVE

AT the recent annual convention of the Farmers' Union speeches were made and resolutions adopted condemning the Agricultural Marketing Act and the Federal Farm Board and demanding the enactment of the McNary-Haugen bill or the export debenture bill. The same body adopted a resolution demanding the abolition of boards of trade or grain exchanges. From all of which even the untutored mind of a hayseed editor may infer that the Farmer's Union is not made up of ultra-conservatives.

ANOTHER GREAT SHOW

IT is good to know that the entries for the International Livestock Exposition, to be held at Chicago November 29-December 6, insure us a great show. This is merely another indication that the livestock industry, with all its ups and downs, is as stable as any other. More eastern stockmen should see the show and would if reduced fares were generally available. The only way we know to get a reduced rate is to become a voluntary delegate to the National Club Congress, held at Chicago November 28-December 5, and secure a certificate when purchasing a ticket, the certificate to be validated at Club Headquarters on the Exposition grounds.

SEED SHARKS

THERE are always some business sharks ready to take advantage of any calamity. The drouth has brought forward some of these in the form of seed salesmen, who report a terrible shortage of various seeds and try to sell them at high prices. The man who knows of a local shortage but does not know the real seed situation is likely to buy of these sharks and pay a high price for something of doubtful value. There is no acute shortage of good seeds. Reliable seedsmen are offering or will offer reliable seeds at reasonable prices. Buy of those who advertise and guarantee their goods, not of the unknown peddler the quality of whose products is also unknown.

INTENTIONS TO INCREASE

IN response to the "intentions to plant" inquiry by the Department of Agriculture the farmers of twelve southern states intend to increase the acreage of early potatoes nearly eleven per cent, as compared with this year. Lettuce producers in four states intend to increase their acreage by about the same percentage. Tomato producers in Texas and Florida expect to expand their acreage 39 per cent over this year or 74 per cent over a five-year average. And onion growers propose to plant an area larger by 13 per cent. These benighted planters do not seem to be aware of the campaign to reduce acreage. Maybe the Federal Farm Board could dodge some hard winter weather and absorb some Southern sunshine and moonshine while enlightening them during the next two months.

AN EGG CAMPAIGN

THE supply of eggs in storage this fall is about two million cases in excess of the supply last fall. These eggs must be consumed during the winter or all branches of the poultry industry will suffer and low prices will prevail for next year's storage stocks. Poultry interests realize the situation and propose a campaign for egg consumption, including a fund of \$100,000 to advertise eggs in consuming territory. The International Baby Chick Association is contributing \$50,000 to this fund on condition that all other interests shall match the amount. This is a legitimate way of getting rid of a troublesome surplus and the best way. It should have the support of all concerned in the poultry industry.

APPLE RELIEF

ON October 27 the police commissioner of New York City granted permission for unemployed men to sell apples on the streets. Fifteen hundred men, under the direction of the labor employment office, applied for apples to sell. They were supplied by the International Apple Association at \$1.75 per box, each man agreeing to pay for the first box as soon as it was sold and then to buy another box. By the following Saturday evening 10,000 boxes had been issued on these terms. The sellers made a gross profit of \$2.60 per box without any investment. This is only one way in which some of the unemployed were enabled to help themselves and without any serious disturbance of any business. Such methods are better than doles or any other form of charity.

A CHEAP BULL

SEVERAL years ago an institution, armed with more vision than finance, made a start in pure-bred cattle. Among its investments was \$65 for a bull, five dollars more than the butcher offered. The offspring of that bull soon proved a sensation in the showing, and the herd which he founded has been among the winners ever since. This sire would have been cheap at any reasonable price. The accident which diverted him from bologna to breed improver was as fortunate for the breed as for his owners. Not all \$65 bulls will sire grand champions, but in view of the number of sires in use which owners know cannot improve their herds too many well bred bulls are sacrificed without a fair trial.

NOT AFRAID

OCTOBER 25 Fred C. Wachtel, a prominent farmer of Effingham county, Ill., was killed by his bull. Nobody witnessed the attack but Mr. Wachtel's body was found in the bull's pasture, terribly mangled and part-

ly covered with dirt. This bull was known to be savage but its victim went to work on a fence in its pasture, stating that he was not afraid of it. The bull was shot—too late.

Most of the attacks made by bulls occur when the victim is alone with the animal, but in the following case two men were not enough to prevent the assault. Russell Galbreath of Highland, Md., and his negro assistant attempted to drive back to its enclosure a dehorned Guernsey bull which had escaped during the night. The bull attacked Mr. Galbreath and knocked him down, continuing to butt and trample him. The negro, name not given, attempted to drive the beast away but was not successful, so ran to the house and got a shotgun. Two loads of shot drove the bull away and its owner was sent to the hospital with broken ribs, a fractured shoulder blade and undetermined internal injuries. "It is feared that his situation is critical" concludes the account sent to us. Those who think that removal of horns makes a bull safe may ponder the above and many other cases.

THE NATIONAL GRANGE

THE sixty-fourth annual session of the National Grange begins at Rochester, N. Y., this week. This oldest of farmers' national organizations, with nearly a million members, has been and is a power for good in the land. The meeting opens with the annual address of National Master Louis J. Taber, a document too long to be published in full. In it he summarizes for us the Grange program which is designed to meet the changing conditions surrounding the industry of agriculture and the nation:

- Better rural organization.
- Efficient and low cost production.
- A marketing structure that protects agriculture.
- Tax adjustment and the broadening of the base of taxation.
- Adequate financial facilities for marketing and production.
- Improved transportation facilities and freight rate readjustments.
- Equality in legislation and the same protection from government other groups enjoy.

While all may agree with this statement of fundamental purposes there is plenty of room for difference of opinion as to the ways and means of their achievement. For such things as better rural organization, efficient production, tax adjustment, adequate financial facilities, a national land policy, conservation, and improved transportation we are all working in accord. But our ideas of a marketing structure which protects agriculture are widely different from those of Mr. Taber. We believe that agriculture is best served by open markets, speculative and other, while he advocates restrictions on trading which would destroy the greatest commercial blessing the farmers of any country have and would result in conditions against which all organizations of farmers would promptly protest. He demands that there be "no amendment of the Agricultural Marketing Act which weakens in any way its ability to serve the farmer." We think that it should be so amended as to prohibit vast speculations in commodities with public funds, believing that such speculation by official agencies is detrimental to the welfare of producers. He continues to advocate the export debenture plan, while we believe it would result in serious losses to agriculture and to the country. That there should be some changes in our federal farm loan system is evident; for it functions when financial conditions are favorable and fails when they are unfavorable, or when it is most needed. And finally, whatever may be our differences of opinion they serve to bring forth discussions whereby the truth may be made manifest and the cause of agriculture, for which all of us are working, may be advanced.

New Jersey Farm Comment

By G. W. HARRIS

EACH individual has a right to his own opinions, but it is difficult to comprehend any serious disaster threatening the American farmer as a result of the extension of the corporation farming idea, as was viewed by National Master Louis J. Taber in his address this week at the annual session of the National Grange at Rochester.

Such a tendency Mr. Taber declares to be "un-American and destructive," adding: "We must not forget that American agriculture is more than making dividends on an investment. It is a way of life, and when we destroy our American type of rural civilization we turn agriculture into an inferior imitation of industrial life."

THE Philadelphia Produce Exchange recently has been accused of unfairness in reporting egg prices on the Philadelphia market. Their daily quotations are used by the Philadelphia newspapers and the Associated Press sends them to papers throughout the country. As a result, any misleading egg quotations might seriously affect prices in the smaller markets of Pennsylvania and nearby states.

The Exchange top prices issued by the Associated Press are 15 to 20 cents below top quotations from the Bureau of Markets. True, they are often quoting a different grade of eggs, yet through the failure of the Exchange to quote their best eggs on the market, a low price for the best grade of eggs is established in the smaller markets.

The Exchange also has been accused of reporting prices lower than actual sales on the market. Their quotations are supposed to be based on sales on the Exchange, yet during the past four months when only two or three sales have been reported on the Philadelphia Produce Exchange, daily prices have been reported by them.

The entire situation on investigation immediately impresses one with the urgent need for uniform grades as a basis for price reporting. The Exchange has its own classification for eggs, the Bureau of Markets another, and New York and Boston others. It becomes difficult and confusing to the poultryman who wishes to compare prices in Philadelphia and compare Philadelphia prices with those of other markets.

The Associated Press is interested only in reporting comprehensive and accurate egg prices in Philadelphia. Within the near future, no doubt, this problem of price reporting will be adjusted to the satisfaction of all poultrymen who use as a guide Philadelphia quotations.

His annual report Secretary Duryee brings to attention some interesting things showing the progress of agriculture in New Jersey.

That progress already has been made in the field of tuberculosis eradication is shown by the fact that, whereas there were only 2,995 herds in the state under the Department's supervision in 1925, the number reached 9,818 in 1930, an increase of about 228 per cent. The total number of animals under supervision increased from 39,312 to 92,221. Five years ago there were but 1,038 herds in the state fully accredited as being free from tuberculosis, while in 1930 there were 6,046, an increase of practically 600 per cent.

"Looking back five years in the problem of controlling contagious abortion of cattle, we find that, while the disease was generally prevalent in 1925, no constructive work on a state basis was being done to control it. The work began in 1927 and since that time, 31,944 cattle have been blood-tested for the disease. Today there are nine herds in the state that are fully accredited as being free from the disease and a total of 6,558 cattle under supervision.

"The birds under supervision for the control of these two diseases, pullorum disease and fowl pox, total 301,000."

NEW JERSEY has experienced its share of plant quarantines during the past few years. Secretary Duryee continues his appeal to have the costs of plant quarantines and the economic value given close consideration and study.

"Since these quarantines are costing the taxpayers of the United States more than \$7,000,000 annually, not to mention the restraint in trade and individual costs which are entailed,

it would seem that a check-up by an impartial body would be a logical procedure at this time. While there is a reluctance on the part of the federal authorities to approve such a study, its timeliness and need are reflected in the opinions of individuals and organizations throughout the country."

A SERIES of short radio talks to New Jersey farm women is being broadcast over WOR by home economics extension specialists of the College. The program for these broadcasts which begin each Tuesday at 12:20 p. m. and continue for ten minutes is as follows:

"Nov. 18, 'Advanced Thanksgiving Preparation,' Miss Doermann; Nov. 25, 'Table Decorations,' Miss Mildred B. Murphy, assistant state leader; Dec. 2, 'Practical Equipment for Christmas,' Mrs. Marion C. Bell, specialist in home management; Dec. 9, 'Labor Savers as Christmas gifts,' Mrs. Bell; Dec. 16, 'Last Minute Christmas Gifts,' Miss Murphy; Dec. 23, 'A Children's Christmas,' Miss Edith D. Dixon, specialist in child training and parental education; Dec. 30, 'Planning Leisure Time,' Miss Dixon; and Jan. 6, 'A Homemade Home,' Miss Dixon.

NEW JERSEY turkey growers are urged to market as many of their birds locally for the Thanksgiving and Christmas trade as is possible. It was pointed out during Turkey Day in Burlington county that the turkey crop is much larger than last year, especially in the East, and local marketing this season would prove most satisfactory.

FRUIT growers and vegetable producers will meet at Atlantic City during the annual convention of the New Jersey State Horticultural Society, December 3, 4 and 5. Last year's convention was held at Asbury Park, and its return to Atlantic City this winter is hailed with approval by the majority of the members of the Horticultural Society.

THERE are 6,297,877 farms in the United States, according to the new census. This is a loss of 2.7 per cent of farms reported ten years ago.

NEW JERSEY should be represented by a large delegation to the Twelfth Annual Convention of the American Farm Bureau Federation which is being held in Boston, December 8, 9 and 10.

Another Vacation Adventure for Readers

Announcing the Second Pennsylvania Farmer Florida-Cuba Tour

WE announce this week a winter vacation tour being planned especially for Pennsylvania Farmer readers and to be conducted by members of the Pennsylvania Farmer editorial staff. This will be the third trip of the kind we have sponsored. The first was an expedition to Florida and Cuba last February in which 131 readers participated. The second was a tour to the Pacific Northwest, Yellowstone and Glacier National Parks this summer, with a party of 242 readers ranging in age from nine to 67 years. Now, in response to numerous requests, we undertake another southern trip. Here are the essential facts:

Our itinerary will include many new side trips, besides nearly all of the features that proved most interesting last winter.

We shall travel by chartered Pullman cars from Pennsylvania to Florida, by modern steamship from Florida to Cuba, by automobile and bus on the numerous side trips.

More than a week will be spent exploring Florida from end to end, besides two full days in a foreign country, tropical Cuba.

We shall start in chartered Pullman cars from Philadelphia, Harrisburg and Pittsburgh on Tuesday, February 3rd. At Washington these cars will be coupled together to form our special train.

All arrangements and all bill-paying and tipping will be done by the Tour Manager, a member of the Pennsylvania Farmer editorial staff. Tour members will have nothing to do but enjoy themselves.

The total cost, covering every necessary expense, including meals and tips, will be about \$196 per person.

Due to limited facilities in the South the size of the party must be restricted to the number for whom first class accommodations are available. We regret that we cannot take as many as went with us to the Pacific Coast this summer. First come, first served. As on previous tours, a deposit of \$20 per person secures reservations.

Complete details and the printed itinerary booklet will be ready in a very few weeks. Send us your name and address if you want a copy of this booklet as soon as it is ready. We shall also be glad to mail it to any of your friends whose names you give us.

HUNTERDON county is well represented in the New Jersey Egg-Laying Contests. Of the total New Jersey entries in the contests 11.2 per cent are from Hunterdon county, 9.6 per cent from Passaic county and 7.6 per cent from Cumberland. Thirty per cent of the pens in the Hunterdon county contest are owned by local poultrymen.

As contests are located in these three counties, Hunterdon, Passaic and Cumberland, the figures would indicate that poultrymen in the vicinity of the contests are making use of them. That is as it should be.

NEW JERSEY's mosquito fighters have become air-minded and attacks from airplanes on the state's best-known insect pest only await the development of the proper dust larvicide.

Research directed toward the making of such a larvicide has already been undertaken at the New Jersey Agricultural Experiment Station, and preliminary tests made last summer indicate that the objective is not impossible of attainment. If further tests give good results, practical applications of the larvicide will be made from airplanes next summer.

By using airplanes loaded with a poisonous dust, mosquito fighters can extend their warfare to many now inaccessible mosquito-breeding areas. Dr. Joseph M. Ginsburg, biochemist in entomology at the Experiment Station, says. Heretofore, he explained, it has been impossible to prevent mosquito breeding in swamps and many other flooded areas that were too large to drain or fill in, or where it was impossible to navigate with boats equipped for spraying oil.

"The only solution of the problem," Dr. Ginsburg pointed out, "is to apply a toxic chemical from above, either by airplane or a slow-moving, powerful machine which could steadily distribute a larvicide a distance of several hundred feet. Of the two mediums, the airplane offers the greatest possibilities. A dust larvicide, because of its lighter weight, is to be preferred to a liquid one."

"The dust must be fine enough to form a continuous cloud yet heavy enough to fall rapidly to the surface of the mosquito-breeding water and not be blown off its course by wind currents. Such a dust must be poisonous to mosquito larvae and pupae and at the same time possess little or no toxicity for higher animals and plants. To be effective, the dust must float in a thin layer on the surface of the water where the mosquito 'wrigglers' come up to breathe."

In his preliminary tests this summer, Dr. Ginsburg used dusts containing various extracts of pyrethrum and coal-tar products dissolved in petroleum oils. The tests were made near Morristown, in the salt marsh areas near Carteret, and in the swamps near the Experiment Station farm at New Brunswick.

The areas flooded annually by the Passaic River offer a large amount of territory for the use of airplanes in mosquito control work, according to Dr. Ginsburg. Included in this area, he said, are certain sections of Passaic, Essex, Union and Morris counties, where the war on mosquitoes could be prosecuted more successfully if airplanes, laden with poisonous dust, were used.

AS a result of the campaign conducted during the past eight years, Worcester, Wicomico and Somerset county, Md., farmers are beginning to reap the reward of care in planting disease-free potato seed, it is announced by Dr. R. A. Jettie, specialist in plant pathology for the University of Maryland Extension Service, who recently completed a field inspection of the potato seed crop in these counties. A decided decrease in the presence of virus diseases was observed by the specialist.

Last year 42 per cent of the growers, who planted 35 per cent of the acreage inspected, were disqualified because of the presence of virus disease in their fields. This year only nine per cent of the growers, who planted four per cent of the acreage, were disqualified. The fine results obtained this year by growers have convinced them that the practice of using only high-quality stock each year will bring success.



LIKE many other farmers who trade their farms for town property when they want to take life easy, we learned some wholesome lessons greatly to our profit. First of these was that we had to work as hard, if not harder, in town than in the country. Every one of us, father, mother, high school daughter, grade school son and the baby, John aged eight, had some kind of employment to keep things going. We had to, for taxes and insurance and repairs melted our resources like wax in the sunshine.

We raised and kept chickens, using an old barn for a two-story coop. We put every foot of the big backyard into vegetables—paying vegetables—and flowers. We took roomers and boarders. We had an agency for toilet articles and even John had a small paper route which he delivered by means of his wagon, for the sack was too heavy for him to carry.

We found other "retired" farmers and their families as busy as we were. The women were doing sewing at home, or going out nursing, cleaning, washing, taking care of children and taking orders for goods, while the men were doing odd jobs, cutting lawns, fixing walks, trimming shrubbery, subbing for workers in various places and setting up machinery on farms in season. Most of them had chickens and were selling high-grade eggs to hatcheries, raising garden stuff or strawberries and eking out a living as we were thankfully doing in our small way. We thought regretfully of the waste land, the idle old barn that might have housed hundreds of chickens, the opportunities to sell vegetables along the highway and all the other things we had never tried in the country, but as we learned we planned—and to good purpose.

Now we are back home, and yet not back home, for the old home was out of our reach, but on a small farm where we are putting in practice the lessons learned in town. We are thankful for the lessons and thankful that we have the little farm paid for as the result of our hard and intensive work. We found that there are drawbacks and advantages in every situation, and that was the best lesson of all. Experienced.

Seed Corn Reminders

IRA C. MARSHALL of Hardin county, Ohio, five times corn king of the world, says his success is due to good seed, thorough cultivation, close planting and fertilizing.

We see that he places good seed first in the list. This shows that Mr. Marshall understands the business of raising corn.

Anybody can put away good ears for seed, because it takes only a little extra time. Nearly every farmer has his method of selection. Dry at once, I repeat, this is the only safe way to keep seed corn that will germinate almost 100 per cent and this is the only safe way that will start strong, growing plants.

Mr. Marshall's five-year record is a challenge to me and I suppose it is a challenge to every corn grower of any spunk at all who has good corn growing soil.

Some day with tons of ground limestone to the acre, on an alfalfa sod, and using Mr. Marshall's system of planting, cultivating and fertilizing which latter includes the modern way of side-row dressing, we will see what we can do about besting such record yields as 176.22 bushels per acre. This was Marshall's 1928 average.

Lebanon county, Pa. Robert I. Weigley.

To Keep Apples

I READ your reply to Mrs. S. J. B. about packing apples for the winter. I am within 33 days of my 75th birthday. When a boy at home it was my duty to pick the apples and store them for winter. The best way then was to pack them in boxes, barrels or bins. I found that dry buckwheat

What Our Readers Say

chaff was the best thing I could get. Late years when I could get buckwheat hulls they were the very best I could obtain.

These times where they have mills that hull the grain you can get the hulls for hauling them away. Apples will keep out in the open under six inches of hulls. I believe that the hulls would keep ice in an ice house. I never tried it.

Butler county, Pa. F. P. Critchlow.

From Bud to Flower

I DON'T recollect of ever reading anything nearer the exact truth than "Friendly Talks" in the October 8th issue. It isn't much wonder we hear of so many tragedies. When fathers and mothers fail to teach their offspring how to behave toward others and let them grow up wild, as Mr. Vincent says, sort of like a wild plant that has had no cultivation. I am opposed to being too hard on children, but I believe in parents assuming control of them.

J. B. S.

Income and Taxes

IN "Farm Comments" of October 11th we note that the Indiana Pomona Grange is seeing the proper way to alleviate one of the farmer's worst troubles—taxes. By all means let income pay all the taxes. Why shouldn't it? Income is a profit, taken by the non-workers, and if the producers would take a little time to study the problem they would see why the harder they work the richer the non-producer gets, for he has it so arranged that he hasn't even paid his share of the taxes—after taking all he has from the producers.

Can't the farmer see that business is built on the principle of getting something for nothing? The farmer gives about 70 cents from each dollar he produces, and then pays taxes from the 30 cents. The shopman gets less than 20 cents of each dollar produced—and the farmer says high wages is the cause of his misery. L. L. Moore.

Comfort for Beast and Fowl

BECAUSE summer has been with us so long it seems scarcely necessary to hurry in providing comfortable quarters for farm animals, but the warm weather which precedes only allows the first cold storms to take heavier toll of the vitality of living creatures. The hunger that cold weather brings results in physical preparation to withstand the winter, but before the blood thickens and additional flesh is gained a storm of bitter wind and sleet may result in heavy colds or lowered vitality which weeks of care may fail to overcome.

The leak in the roof of a poultry house, the broken windows in the stable, all these tag-ends of tasks coming in the fall, keep us busy, but the results make the work very worth-while.

Many a pocketful of money has been scattered through a barbed-wire fence on the warm side of which a faithful farm animal has tried to find shelter from driving storms.

M. C. S.

Not So Bad Off

I AM (as usual) in full accord with Alva Agee in his one-farm survey. I am the house-wife on a modest farm, and can tell from experience that he has the right idea exactly. So many of the writers sail over my head, and I trudge along, trying to hitch my wagon to their star. In reading,

but every once in while comes a letter that is plain English to my untutored mind.

We would be distinctly termed a backward community, in a survey, but we don't feel ourselves as such. We think we have much to be grateful for; we have our joys, and pleasures, and eternally strive to better ourselves. Mr. Agee's article was a wholesome and sane that it touched an answering chord in my heart and I wish him to know it, as I once read in his letters that he thoroughly liked the people to agree with him, whether scientists did or not.

Progress comes so slowly that we fail to realize it, and take things for granted. It has not been so many years that an automobile on the road called for the neighbors to phone ahead and tell others—sometimes to view the curiosity, sometimes to "Get your children in the yard; an automobile's coming," and how we hustled them from any proximity with the road, having an undefined feeling that the things might jump the fence any minute.

Just a few years ago the fortunate owner of a car put it up, took off the tires and locked the garage when the first mud came. Now cars run all winter, dirt road and all. Instead of a luxury, a car is an economic necessity to the farmer.

And as the quoted gentleman says, the biggest boon of all is the emancipation of the mother. Many are the times when we shed an apron, do a coat, cover up the table, and accompany the husband, or son, to wherever his errand takes him, buy a loaf of bread and a couple of pounds of fresh meat, and back home to get a supper that tastes as good as if we had stood over the stove all afternoon. To enumerate the virtues of the family car is too huge a task.

Household Conveniences

The oil stove displacing the range is another step forward for the house-wife. My neighbor has an oil range on which she cooks with comfort for any number of people, baking and all. The radio while not so general, is becoming more of a necessity all the time and soon will hold its own among other leaps, not steps, forward. Linoleum floors, water pumped into the house, light plants or falling those the use of gasoline lamps and lanterns are only a few of the helps, and we must not forget the R. F. D. for which the Grange worked so long, bringing the reading matter of the world to our door, and making the daily paper blossom as the rose. But to sum it all up, to me the car is the best outlet we have, eliminates time and distance, and gives a zest to life we never had ere car building, which directly influenced road building.

We live one and one-half miles from U. S. Route 21, and find it comparatively easy to reach the highway, though last winter there were a few weeks we walked, or rode to the route, on account of the deep mud, but that was such an advance over simply staying at home or taking all the long day to go to town, nine miles distant, that we thought nothing of it, but looked on it as necessary evil.

And it is so ad infinitum, more left untold than told. Farmers are not so bad off, eh, what? Jackson county, W. Va. Nellie R. Nesselrode.

Dehorned Bulls

I SEE in the Pennsylvania Farmer many false bull cases. On one occasion I had a little trouble with a bull, but not serious.

I never allow a bull to carry horns. Cut them off, let it be hot or cold. Stop the blood and keep the flies away.

If the bull shows any signs of madness put a ring in his nose and put a piece of chain in it. I have never had any trouble after such treatment. Madison county, Va. J. W. Nelthers.

John Imberlay, Trustee

By Homer Green

Copyright, 1930, by Perry Mason Company, Boston, Mass.

SYNOPSIS

There is a deep mystery about the trust under which John Imberlay, president of the Citizens' Bank of Brierly, is acting as trustee. The creation and conditions of the trust and the beneficiaries are matters of which Mr. Imberlay alone appears to have any knowledge. Mrs. Leighton, a widow, and her lame son, Robert, have just left Mr. Imberlay's office after an unsuccessful plea to have an extension of time on the long over-due mortgage on the farm. Mr. Imberlay has flatly refused their request but later seems interested in Robert and also in Rafe Orchard's neighboring farm and makes inquiries concerning both farms. Robert and his mother have tried without success to borrow money to save their home. A few days later they receive a letter from John Imberlay offering Robert a position in the bank and granting an extension of time on the mortgage.

Please accept the sincere thanks of both my mother and myself for your kindness in allowing us time to make the payment of interest due on the mortgage. You have relieved us of a very great anxiety, and we shall make every effort to pay up the interest in the shortest possible time.

If it is agreeable to you, I will report for duty next Monday morning.

Yours truly,

Robert C. Leighton.

Mrs. Leighton heartily approved of this letter. Indeed, she considered it a masterpiece of composition. In itself, it compensated her for all the sacrifice she had made in order to keep Robert in school when he was young, and to give him a course in the academy when he grew older. So the letter was duly sealed, addressed and stamped, and Dick was despatched with it to the Broad Valley post-office. Ten minutes later Robert and his mother were on their way to call on Rafe Orchard at his cottage up the hill.

"If it weren't for one thing, mother," said the boy, "I wouldn't ask odds of any one now in the race for success."

"And what's that, Robert?" He stopped, leaned against the fence beside which they were walking, and tapped his limp foot significantly with his cane.

"This foot, mother. Sometimes I— Well, what's the use? Nobody's to blame. It never could have been helped. Only—"

"I know, I know. It's your cross. We each have one; but yours is harder to bear than most of 'em. Be patient, deary. Who knows? Maybe one of these days it'll prove to be a blessing."

She slipped her hand affectionately into his, and together they walked on up the road through the sweet June twilight.

AS she rubbed her tinware at the sink with great vigor, June Orchard talked to her father on the porch outside:

"You survived my first pie crust, daddy, and the only effect of my first raised biscuit was to give you a slight touch of writers' cramp; and now if you pull through this experience with my first short-cake, and have nothing worse than a quail of conscience, I shall be glad."

The man seemed to be paying little attention to what she said. He sat on the porch, with a guitar across his knees. He was bareheaded, and his iron-gray hair hung in loose waves to his shoulders. He had the eyes of a poet and the face of an artist, yet he was only a day-laborer. Time was, indeed, when he had had wealth and lived in modest luxury. But that was when he was young and careless, before June's mother died, before June herself was old enough to know: so long ago that even the memory of it was dim, and never troubled him—not even in his dreams.

June was still busy in the kitchen, putting away her dishes. After a minute she called to him again: "Daddy!"

"Well, June, what is it?"

"I need a new dress, daddy, and a new pair of shoes and a new hat. Otherwise I can't go to church any more this summer."

He made no response, and after a moment June continued: "The opera-cloak and the pearl necklace can go 'till fall, but the other things are a burning necessity." Still there was no answer. "Daddy, why don't you speak? Has the shock proved fatal to you?" She went to the kitchen door and looked out.

"June," he said, soberly, "have you finished your work?"

"Yes, daddy; this minute."

"Then come out here, please. I want to talk to you."

She peched herself in her favorite corner of the porch railing. "Yes, daddy," she said, "I'm waiting."

"Well, June, I'm glad you spoke about the new dress and things. I haven't any money just now, but I intend to have some in the course of a week or two, and the very first dollar I get shall go toward your clothes."

"And the second dollar, too, and the third?"

"Yes, and the fourth and fifth, and more, too, if you want them. But what I was thinking about is this, and I've been thinking about it a good deal lately, and your request has brought it straight home to me. You are nearly sixteen now, aren't you?"

"Yes."

"And you're getting too old and big to live from hand to mouth with me, as you've been doing. Here I am, well and strong and able to work, and dawdling half my time away with my pencil and books and violin, while you are making a slave of yourself in that kitchen, deprived of fitting garments and surroundings and companionship. It's all wrong, June, and I ought to be ashamed of it, and I'm going to start out tomorrow morning and find steady work somewhere. I don't care what kind or how hard it is. Help me to pull myself together, June, and put my brain and muscle to some good, practical use. There, that's what I wanted to say."

FROM the time when he had taken her from her father, eight years before, he had been accustomed to appeal to her for advice and assistance. It was often done half-humorously, it is true, but she had been a real help to him in many more ways than by her labor in the kitchen. Yet tonight there was a soberness in his face and an earnest ring in his voice that she had never before seen or heard. She jumped down from her perch on the railing and flung her arms about his neck.

"You dear daddy!" she cried. "You are so good! I didn't mean anything when I asked for the new things, indeed I didn't. Of course I'd like to have a new gown. Any girl would. But I can wait till the money comes, and I'll help earn it; and we'll be just as—Why, Mrs. Leighton, how you frightened me! Bob, why didn't you whistle, or something?"

"That's to pay you back for startling us this afternoon, June," responded Mrs. Leighton, lightly. She and Robert had entered the gate of the Orchard yard unnoticed, and were at the steps of the cottage porch before either Rafe or his daughter was aware of their presence.

"Well," exclaimed June, "I guess you may come up on the porch if you'll both promise not to repeat the offense! Here's a rocking-chair, Mrs. Leighton. Bob, you've got to sit on the porch and balance yourself, just as I do."

Rafe Orchard gave his guests a courteous greeting.

"We came over," began Mrs. Leighton, "to see if—"

"To see if daddy was sick from eating my short-cake?" broke in June. "Oh, no! It gave him a slight attack of melancholia, that's all."

"What a rattlehead you are, June!" exclaimed Mrs. Leighton, good-naturedly. "No, I'll tell you what we came over for. You see, Robert," she made the announcement with pride,—"Robert has been offered a position in the Citizens' Bank at Brierly."

June was down from her perch in an instant, shaking hands joyously with Robert. Then she ran into the kitchen and brought out a chair. "You mustn't sit on the railing any longer," she said. "Take a chair. You're entitled to it."

More deliberate but not less hearty were the congratulations of June's father. For between this man and boy had grown up through the years a friendliness and a comradeship, the result of mutual confidence. Although admitting the weaknesses of Rafe's character,—they were apparent to all the world,—Robert could not help admiring the man's simple honesty, his homely virtues, and that rare courtesy and fine intuition which stamped him as of gentle mold.

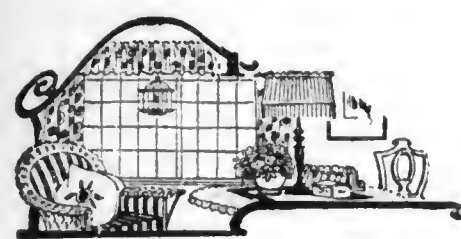
And Rafe Orchard could not but approve and appreciate in Robert the qualities in which he himself was so sadly lacking—energy, perseverance, the ability to think a thing out and reach conclusions, and push persistently on in the face of difficulties.

"Yes," added Mrs. Leighton, with quite an air of importance, "and Robert has decided to accept."

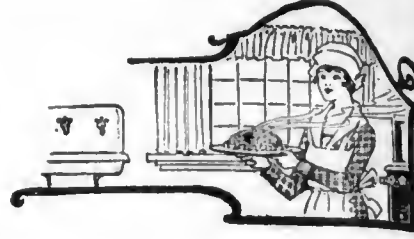
June darted into the kitchen again and brought out another chair, thus exhausting her store. "Take two chairs," she said to Robert. "One doesn't do justice to the occasion."

There were many inquiries about Robert's good fortune, about the nature of his duties and about his residence at Brierly. They all agreed that it was a splendid opportunity. June was especially enthusiastic over the situation.

(To be continued.)



The Farm Home



Imagination or a Lie

By JEAN LATHOM McFARLAND

I HAD taken my sewing and gone to spend the afternoon with my neighbor, Mrs. Graham. We were comfortably seated on her vine-covered porch chatting away when Raymond, her three-year-old son, came running around the house and rushed eagerly to his mother's knee.

"Oh, mamma," he cried, "I was making a sand house with hundreds and hundreds of windows when a little toad hopped right out from under our rose bush and said, 'Come with me, Ray!'"

"Raymond!" cried his mother in alarm. "When will you ever stop telling such tales? Why you will grow into a regular liar."

Then she turned to me, "I don't know what makes Raymond talk like that. I have tried my best to break him. My other children were always truthful enough. I can't understand what makes him want to always be telling such stories."

I looked at poor little Raymond who had hung his head in embarrassment and shame.

"Why," I said, "I was anxious to hear if Raymond went with the little toad and what kind of a house he found."

Mrs. Graham was astonished that I should take that view of things and we had quite a discussion about imagination and lies. I tried to show her that Raymond had a valuable gift; that no matter where he was in life he could always imagine away the ugly things or change them into something beautiful; that his happiness wouldn't be bounded by persons or things because his mind could always furnish him with romance and adventure.

Mrs. Graham still looked dubious when I had finished but she gave a sigh of relief. "Well," she said, "I hope something good comes of it."

The conversation drifted into other channels and neither of us mentioned the subject again. But that evening after supper while I was making up my bread sponge for the next day, the incident came back to my mind and I began to wonder just what was the difference between imagination and a lie. I had taught school and I know there are some children who lie. They are a great problem to the teacher. When is the proper age to correct them and how is a mother to recognize a lie from imagination?

Suddenly I remembered something that happened when I was a girl at home. My little sister, aged two and a half years, had got into the cream. When mother discovered her she was smeared with cream from head to foot.

"Why, Kathryn!" mother exclaimed in dismay.

The tone of mother's voice made Kathryn know that she was doing something she should not be doing. Immediately she said, "I didn't do it, Nevie did." Nevie was an older sister.

Circumstantial Evidence

"No," mother said, as she scrubbed the cream from Kathryn's fat, little arms, "It was Kathryn that got into mother's cream. You mustn't say that Nevie did something that you did."

Kathryn had told many an imaginary tale but I never heard mother reprove her except perhaps to say, "Oh, yes, that's a make-believe story, isn't it?"

It was because Kathryn sensed that there might be punishment and she wanted to escape it that she resorted to a lie. The lie of a real young child is usually so obvious that a mother has no trouble in knowing for certain that the youngster has told an untruth. Then when children are young is the time to emphasize the fact that they must tell the truth, because as they grow older they get wise enough to know when they are caught with the goods, so to speak, as Kathryn was with the cream, and then they use a lie only when the parent has their word to depend on.

Sometimes too severe punishment

for the crime to which they confess almost makes a child a liar. The wrong doing cannot be entirely overlooked, but a young child never does a really wicked thing, so it seems to me that a mother should emphasize that the truth be told and commend the child for telling it. A little serious talk about the naughtiness they have done and what might happen another time finished off by telling them again how proud you are that they have told the truth usually has the desired effect of steering a child on the road to truthfulness. However, never let us be guilty of spoiling a child's mind by calling his imaginary stories lies.

Editor's note:—This is a great problem with mothers and we offer you some valuable help in our Home-Makers' Library. We have discussions on this very subject by two of our nation's greatest child specialists, Mrs. Greenberg, in her wonderful book "Your Child Today and Tomorrow," devotes an entire chapter to Lies and another to Imagination. In Angelo Patri's helpful volume on "Child Training," lies are well handled. Either volume may be borrowed for two weeks. Send 12c postage to Home Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

In Case of Fire

EVERY ONE hopes to escape a fire and yet in almost every community there stands a gaping cellar, mute evidence of havoc wrought by flames.

Nearly every householder now carries insurance, but how often you hear the plaint, "The actual value was covered, but I lost so many treasures that can never be replaced."

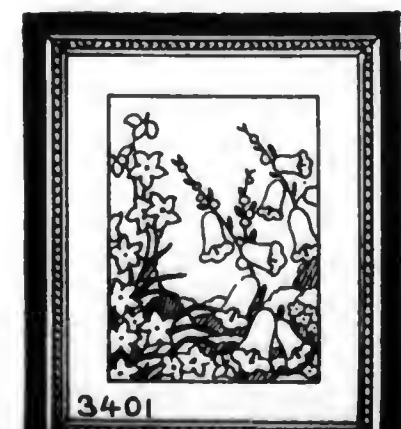
One woman is solving this problem by keeping the family Bible, birth certificates, baptismal records, jewelry that has been in the family for generations, baby's first stocking, and all the little treasures that are in the "can't be replaced" class in a strong box. This is always kept close to the front door.

Members of her own house and a trusty neighbor have been told, "In case of fire save that box" and she feels that unless the flames start at a time when the family is away from home her treasures are comparatively safe.

She also keeps her silverware in one drawer in the sideboard and under it there is a square of firm muslin. In case of fire she could gather up the four corners of the muslin, making a bag in which to carry her silver to a place of safety.

L. M. Thornton.

The Latest in Pictures



NEEDLEWORKERS really wonder how it is possible to make such beautiful designs with so little work. No. 3401 represents spring flowers; No. 3402 is a glittering winter scene and No. 3403 is a shady nook on the hill. A lesson chart given with each design explains the various simple stitches and how to use colored thread. Stamping is on colored fine quality all wool felt, size 8x10. Price of stamped felt for any one design is twenty-five cents and if desired with necessary embroidery floss, price is only fifty cents.

Send your order to Embroidery Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

Timely Tips

TWO rows of machine stitching with a lengthened stitch can be used to replace gathering by hand. The under thread is drawn up and caught at the ends.

Organdy collars and cuffs made out of double thickness of materials are quite desirable as double thickness prevents the usual curling.

Tunics are scheduled for this winter. Fullness is often introduced in the underskirt by low placed pleats.

To keep the shoulders of silk dresses from showing soil from perspiration place an inside yoke fastened into the neckline and shoulder seams. This may be made from left-over silk scraps and is made detachable so that it may be removed for frequent laundering.

Tasty Spreads

By GERTRUDE S. STEWART

THE farm woman can at a moment's notice have the very tastiest assortment of sandwiches for her afternoon callers or the Sunday evening supper. The school lunches are better too, if there new ideas are tried. It is usually on the shelves of the country home-maker's cupboard that spicy relishes of all kinds are to be found. These relishes are combined with heavy salad dressing and added to thin sliced buttered bread. Then watch the kiddies "smack their lips."

If you have no relishes, one of the finest substitutes I know of is stuffed olives and sweet pickles ground through the finest blade of your meat grinder. Combine this mixture with heavy salad dressing. A few spoonfuls of drained canned tomato are very nice also.

Perhaps you have a few remaining green and red peppers. If so, they are tasty with any of the above combinations. There is really no end to the variety you may have in special sandwich spreads using always a thick salad dressing for the foundation. In this era of raw foods for health, why not try grated carrot, shredded cabbage or lettuce, minced parsley or water cress?

My favorite recipe for the thick dressing is as follows: One cup vinegar, three tablespoons sugar, two tablespoons flour, one-half tablespoon dry mustard, one teaspoon salt, one-half teaspoon pepper, four egg yolks, one tablespoon butter. Heat the vinegar. Sift the five dry ingredients together and add them to the beaten yolks and blend the mixture thoroughly. Pour the boiling vinegar very slowly over this mixture, stirring constantly. Cook to boiling point over a slow fire, stirring all the while. Remove from the fire, and add the melted butter—beating it in well.

Apple Recipes

Chocolate-Coated Candied Apples

HERE'S a truly wholesome confection that is easily made with materials to be had almost anywhere. Be sure to use firm-fleshed, tart, apples for good results. The recipe was originated by the Bureau of Home Economics of the U. S. Department of Agriculture.

One cup sugar, one cut honey, one-half cup water, one-fourth teaspoonful salt, three tart well-flavored apples.

Prepare a syrup of the sugar, honey and water and salt by boiling for two or three minutes. Wash, core and pare the apples, cut into half-moon shapes, pieces about half an inch thick, dry in the syrup and cook rapidly until the apples are transparent and practically all the syrup has been absorbed. Lift onto waxed paper to dry.

Cut up into small pieces some of the cake chocolate made especially for dipping candies, put into a shallow dish over hot water to melt slightly and stir with the fingers until the whole mass has melted. Dip the pieces of apple into the melted chocolate and place on waxed paper to dry, which requires only a short time when this method of coating is used. Pack the candies in layers between sheets of waxed paper.

Apple Compote

Six tart apples, two cups sugar, two cups water, red coloring or red cinnamon candies, one-eighth teaspoon salt.

Select tart apples that will hold their shape when cooked. Pare and core them. In a pan large enough to hold all the apples make a syrup of the sugar and water, add the red coloring or red candies, and salt; put the apples in and cook until tender.

Cottage cheese makes an excellent dressing for sandwiches if moistened with cream, dressing, cream, or a little lemon juice. Whole wheat bread is recommended for children. Some of the popular fillings with cottage cheese are: cheese with chopped parsley, celery, pickles or olives; a tart dressing on a layer of cheese.

The Country Child in the White House

AT least fifty per cent of the children of the United States live in the country or in small country towns. Upon the health and protection of these rural children depends fifty per cent of the successful citizenship which America hopes to have when the forty-three million who are now children come of age.

With that idea in mind the White House Conference on Child Health has been planned. Eleven hundred experts in child care will meet at the November assemblage with President Hoover to specially consider the needs of the rural child as well as those of his city cousin. Surely this is one of the greatest steps that has ever been attempted in child welfare, and we should all watch the proceedings from November 19 to 22 with open-minded helpfulness.

Fight Against Diseases

In each of the four sections—the country child—your child and mine—is given the most splendid consideration. These four different committees are first, medical service, with special reference to motherhood and infancy. Another work of this section is to better systems of attacking childhood defects, such as diseased tonsils, defective hearing and poor vision. What a blessing these studies will be to country homes!

Section two involves a complete investigation of public health service and administration. Here the typhoid ravages of the country are in danger of being routed, for even the barnyard manure piles are at last getting the criticism for which we women have long been wishing.

The third section is devoted to education and training, not only for the child, but for the entire family—the school youngster, vocational guidance, child labor, recreation, special classes, and the parents, too.

Section four deals with the handicapped child. Would it not be well for us as parents, as Parent-Teachers Associations, as clubs and fraternities, to watch the work of this conference and fall in line to lend a hand to Child Welfare?

G. S. S.

Ham Hawaiian

COVER a one-inch-thick slice of ham with cold water and bring to the boiling point. Drain off water, and if the ham is very salty, repeat the process. Sprinkle ham with five tablespoons brown sugar. Cook until brown on both sides. Add one cup pineapple juice. Cover and cook slowly until tender. Remove cover and lay the ham six or eight small pieces of canned pineapple that have been heated in hot fat. Sprinkle lightly with sugar and place a marshmallow in the hole of each piece of pineapple. Put under broiler and brown the marshmallows. Serve immediately.

Cottage Cheese Dishes

COTTAGE cheese may be used in a variety of dishes from soup and salads to desserts, according to the New York state college of home economics at Cornell University.

In salads, it may be used to fill tomatoes, canned pears, peaches, slices of pineapple, prunes or celery stalks served on lettuce with boiled or creamed dressing. It may be common bread with dressing and nuts, parsley, or jelly and formed into balls or small loaves which are sliced and served on lettuce. The balls may be rolled in grated cheddar cheese and served on lettuce with dressing.

Cottage cheese makes an excellent dressing for sandwiches if moistened with cream, dressing, cream, or a little lemon juice. Whole wheat bread is recommended for children. Some of the popular fillings with cottage cheese are: cheese with chopped parsley, celery, pickles or olives; a tart dressing on a layer of cheese.



What's New in Fashions?

No. 6917.—Ladies' dress. Cut in five sizes: 31, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 4½ yards of 39-inch material. For contrasting material ¾ yard 39 inches wide is required cut crosswise. Price 15c or two for 25c.

No. 6914.—Ladies' dress. Cut in six sizes: 31, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires 4½ yards of 39-inch material. Price 15c or two for 25c.

No. 6797.—Ladies' dress. Cut in five sizes: 31, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 4½ yards of 39-inch material. For contrasting material ¾ yard is required cut crosswise. Price 15c or two for 25c.

No. 6746.—Misses' dress. Cut in three sizes: 16, 18 and 20 years. An 18-year size with collar and sleeves, requires 4½ yards of 39-inch material. For contrasting material ¾ yard is required cut crosswise. Price 15c or two for 25c.

No. 6921.—Misses' dress. Cut in three sizes: 16, 18 and 20 years. A 16-year size requires 3½ yards of material 35 inches wide. The collar and cuffs of contrasting material require ¾ yard 35 inches wide. Of finished plating or frilling 1½ yards will be required. The tie ends of ribbon require ¾ yard. Price 15c or two for 25c.

No. 6930.—Boys' Suit. Cut in four sizes: 2, 3, 4 and 5 years. A 4-year size requires ¾ yard of 35-inch material for the blouse and 1 yard for the trousers. Price 15c or two for 25c.

No. 6743.—Ladies' dress. Cut in five

sizes: 31, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 4½ yards of 39-inch material. For contrasting material ¾ yard 39 inches wide is required cut crosswise. Price 15c or two for 25c.

No. 6180.—Girls' dress. Cut in five sizes: 1, 2, 3, 4 and 5 years. A 3-year size requires 1½ yards of material 32 inches wide or wider. To trim her hair edges with plaiting will require 1½ yards. To make collar of contrasting material requires 1-3 yard 39 inches wide, and cut crosswise. Price 15c or two for 25c.

No. 6936.—Ladies' skirt. Cut in six sizes: 28, 30, 32, 34, 36 and 38 inches waist measure. A 32-inch size requires 2½ yards of 39-inch material. The width of the skirt at the lower edge with plait fullness extended is two yards. Price 15c or two for 25c.

No. 6934.—Ladies' blouse. Cut in six sizes: 31, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires 2½ yards of material 35 inches wide. For contrasting material ¾ yard 35 inches wide, cut crosswise is required. Price 15c or two for 25c.

No. 6925.—Girls' dress. Cut in four sizes: 6, 8, 10 and 12 years. A 10-year size requires 2½ yards of 35-inch material. The collar, cuffs and belt of contrasting material requires ¾ yard 35 inches wide, cut crosswise. Price 15c or two for 25c.

HOW TO ORDER

All patterns 15c each, two for 25c. Be sure to give number and size. Address Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

When Your Cough Hangs On, Mix This at Home

The best cough remedy that money could buy, can easily be mixed at home. It saves money and gives you the most reliable, quick-acting medicine you ever used. The way it takes hold of stubborn coughs and chest colds, giving immediate relief, is astonishing. Any druggist can supply you with 2½ ounces of Pinex. Pour this into a pint bottle and fill up with plain granulated sugar syrup or strained honey. It's no trouble at all to mix, and when you once use it, you will never be without it. Keeps perfectly and tastes good—children really like it.

It is surprising how quickly this loosens the germ-laden phlegm, and soothes and heals the inflamed membranes. At the same time, part of the medicine is absorbed into the blood, where it acts directly on the bronchial tubes, and helps the system throw off the whole trouble. Even those severe coughs which follow cold epidemics, are promptly ended.

Pinex is a highly concentrated compound of genuine Norway Pine, containing the active agent of creosote, in a refined, palatable form. Nothing known in medicine is more helpful in cases of severe coughs, chest colds, and bronchial troubles.

Do not accept a substitute for Pinex. It is guaranteed to give prompt relief or money refunded.

PINEX
for Coughs

COLD WEATHER, Health Style, Comfort
with **Indera** **FIGURE IT** **COLDPROOF** **KNIT SLIPS**
REG. U.S. PAT. OFF.

All three are yours if you wear an Indera Figure It Knit Slip.

Indera protects your health by keeping warm in and cold out—mean in the cold weather.

Indera is tailored to fit your figure. You can wear it under your smartest dress.

You can wear an Indera in comfort. For it has a wide variety of fast color combinations. In wool and rayon, all wool, wool mixtures and cotton. Send for FREE Indera Style Folder No. 86, showing Indera Slips in color. Please mention dealer's name and address.

It has patented STA-UP shoulder straps—straps that always stay up.

At your dealer to show you Indera. It comes in a wide variety of fast color combinations. In wool and rayon, all wool, wool mixtures and cotton. Send for FREE Indera Style Folder No. 86, showing Indera Slips in color. Please mention dealer's name and address.

INDERA MILLS CO.
Winston-Salem, N. C.

10% CUT
FROM CATALOGUE PRICES
FOR SHORT TIME ONLY

Complete for 6-Room House

WAS \$175 NOW \$157.50

Complete for 6-Room House

Write for FREE Catalog 90

J. M. SEIDENBERG CO., Inc.
254 West 34th Street, New York

QUICK RELIEF FOR RHEUMATISM, BRUISES, PAINS
JAPANESE OIL
Rub antiseptic Japanese Oil on aching part. It generates a pleasant soothing heat that drives out pain. QUICK! Works better than any other liniment. Like old-time liniments. 4½ Years Success. At drug stores.

BIG BLANKET SALE!
100% Pure Australian Wool Blankets. 12½ lbs. pure wool in each. If slightly mislabeled, almost impossible to detect. **SAVE 1/3** VERMONT BLANKET CO., Box 615, Duff Pt., Burlington, Vt.

WRIST WATCH GIVEN
For every 1000 copies of this issue. Send name and address to: Wrist Watch Given, 1174 Chestnut St., Philadelphia, Pa. Write today for your watch.



Drive safely-use WEED TIRE CHAINS

13 out of every 100 automobile accidents are caused by skidding and loss of traction. What a waste of money! What a pity for the human suffering that can so easily be avoided by safe driving with Weed Chains. Get your Weed Tire Chains now and be on the safe side when driving in ice, sleet, snow or mud. Get genuine Weeds.

Life Savers!

WEED CHAINS

A product of
American Chain Company, Inc.
Bridgeport, Conn.



Weed Tire Chain RADIO PROGRAM

Tune in every Friday evening at 8:30 Eastern Standard Time, 7:30 Central Standard Time, over the Columbia Broadcasting System:

Akron, Ohio	WABC	Fort Wayne, Ind.	WOWO	Pittsburgh, Pa.	WTAE
Baltimore, Md.	WCAO	Kansas City, Mo.	KMBC	Providence, R. I.	WEAN
Boston, Mass.	WVAC	Minneapolis, Minn.	WCCO	St. Louis, Mo.	KNOX
Buffalo, N. Y.	WKBW	New York, N. Y.	WABC	Syracuse, N. Y.	WFBL
Chicago, Ill.	WMAQ	Oil City, Pa.	WLBW	Toledo, Ohio	WSPD
Cincinnati, Ohio	WKRC	Omaha, Neb.	KOIL	Washington, D. C.	WMAZ
Dallas, Texas	KRLD	Philadelphia, Pa.	WCAU	Oklahoma City	KFZP
Detroit, Mich.	WXYZ			San Antonio, Tex.	KTSA

When writing advertisers please mention Pennsylvania Farmer



Regulating Often Doubles Egg Production

Maybe the manager of Pratt's Poultry Experiment Farm hit the nail on the head when he explained: "Regulating keeps birds eager for their feed, whether in or out of season. That is important because they can't lay if they don't eat. Second, no matter what feed you buy, it lacks some one or more minerals important to muscle, feathers, blood, bone, shell and eggs. Regulator supplies every mineral deficiency. And the vegetable tonics in Regulator quicken appetite and digestion. Regulator satisfies a natural craving or demand of the bird's system. That's why birds are right up on top of their feed. We often double production of a slow pen by Regulating."

Try Regulating your flock 80 days. It costs but a few cents per 100 pounds of meat. Thousands of poultrymen advise it. See your dealer. PRATT FOOD COMPANY, Philadelphia, Pa.

FREE—A 50c Package of Pratt's N-K Tablets for Poultry Worms

We want Pratt friends to know about this great new tape and round-worm Killer. Of nicotine and kamala. These powerful drugs, cleverly coated to break only in the gizzard, get to worms fresh and effective. A 50c package free. See the coupon.

Pratt's Poultry Regulator

SEND COUPON AND REGULATOR TRADE MARK FOR FREE N-K TABLETS

Send us this coupon and the "Rooster and Cart" trade mark from any package, pill, bag or drum of Pratt's Poultry Regulator, and we will send you free and postpaid a special 50c package of Pratt's N-K Tablets. Also a valuable new booklet, Common Poultry Diseases.

PRATT FOOD CO., Dept. 150A, 124 Walnut St., Philadelphia, Pa.

Name _____
R.F.D. _____ City _____ State _____

Dealer who sold me Poultry Regulator _____

The Market Place

By W. R. WHITACRE

WHAT does it cost to market potatoes by the various methods that are available to the Pennsylvania grower? A study published in the annual report of the Pennsylvania Experiment Station shows that the costs vary from 2c to 15c per bushel. The study was based on the cost of marketing the 1928 crop of 450 growers throughout Pennsylvania.

The method of marketing which returned the largest net profit was sales to consumers at the farm. The second largest net return was from sales to retail stores; hotels and restaurants were next with house to house delivery following closely. Marketing at farmers' market houses was the most expensive method of selling. These outlets represent a more or less retail method of selling and are in contrast to rail shipments to terminal markets.

The three methods studied for rail shipped potatoes were: City buyer f. o. b. shipping point; local buyer f. o. b. shipping point, and commission sales. It is interesting to contrast net returns by these three methods. The net price received by the commission method of selling was 54c a bushel, by local shipper 41c and by city buyer 46c. It would be valuable information if the grower could learn what potatoes of equal grade and quality would show if handled by these three methods.

Snapping Turtles

It is a long jump from potatoes to snapping turtles, but the question of net returns brings it to mind. Recently I investigated the complaint of a midwestern shipper who had sent snapping turtles to this market and had not received adequate returns. The turtles were placed in sugar barrels covered with burlap and shipped by refrigerator freight. The receiver was to pay freight drayage and was to deduct this along with his commission of ten per cent from the price received. The shipper was to be paid the balance.

In the case of one of the shipments the dealer sold the turtles for 5c to 8c a pound live weight, but when the costs of marketing were deducted he had a loss of about \$3.50 and the shipper had nothing. This is a rather striking illustration of the difference between gross price and net price and of high cost marketing.

In the course of the investigation I learned a number of things about snapping turtles that I had never known before. One was that the majority of the supply comes from Minnesota, Wisconsin and Michigan, and that the best market season is from November to February. Prohibition has influenced the turtle market; the very large turtles are no longer desirable and are hard to sell. I am told that the large snappers were used by the saloons in the "old days" and now there are few buyers for them. The desirable weight is from eight to twelve pounds. Snappers weighing over 16 pounds are almost unsalable and rarely bring much over freight charges.

Ugly Brutes

The snappers often reach such weights as 30 pounds and run occasionally up to 50 pounds. I saw some that weighed over 35 pounds. One who has never seen them cannot picture just what a 35-pound snapper looks like. It is the ugliest crawling thing that I ever looked at, especially when confined to an old sugar barrel. Snappers are hard to kill and live for a long time, but a spell of very cold weather or a real warm spell while they are in shipment causes them to die off rapidly.

It is said that there are more different kinds of meat in a snapper than in anything else. There is a white

meat resembling chicken breast, a stringy dark meat that tastes much like flank steak of beef and a jelly-like meat that isn't like anything else, as well as a half dozen more varieties. In addition the "cow" or female turtle often contains large quantities of eggs ranging from the size of a pea up to that of a large marble.

The price of snappers varies with the supply, but at present you can buy choice lots of 250 pounds or over for 8c a pound, a couple of snappers for a pot of soup for 15c a pound live weight, and if you visit the restaurant and order a dish of creamed snapper you will get a few slivers of meat in a bowl of gravy for 35c to 60c depending on where you eat.

Truck Crops

By GILBERT S. WATTS

RECENTLY I heard a New Jersey grower state that in his opinion severe price cutting, when sales are slow and supplies large on the roadside or retail curb markets, leads only to confusion among both buyers and sellers and results in very little increase in the volume of produce moved. My experience and observation agree fully.

Of course unusually high prices restrict sales. Volume of movement usually increases rapidly down to the price which most consumers would characterize as "very reasonable." After that price cutting apparently is inclined to prove an ineffective means of boosting sales. In the field of many commodities it is common knowledge that buyers are slow to purchase in an unsettled and falling market.

An Example

To be specific a few years ago supplies of local strawberries were exceptionally heavy. At the beginning of the season prices ranged for a few days at six to eight dollars a crate. Only those consumers who would pay a premium for fancy stock to preserve or can bought crates at this price. Later when the general price broke sharply the price on my market was placed at four and a half dollars a thirty-two quart crate. It then seemed that all those who desired strawberries in quantity bought freely. A little later berries were offered for a day or two by hard-pressed growers at three to three fifty a crate and we followed this price for the moment. But I question very seriously whether, taking the county as a whole, enough additional crates were sold at the very low price to bring in as much income as would have been secured at the "very reasonable" price.

Cost of Production

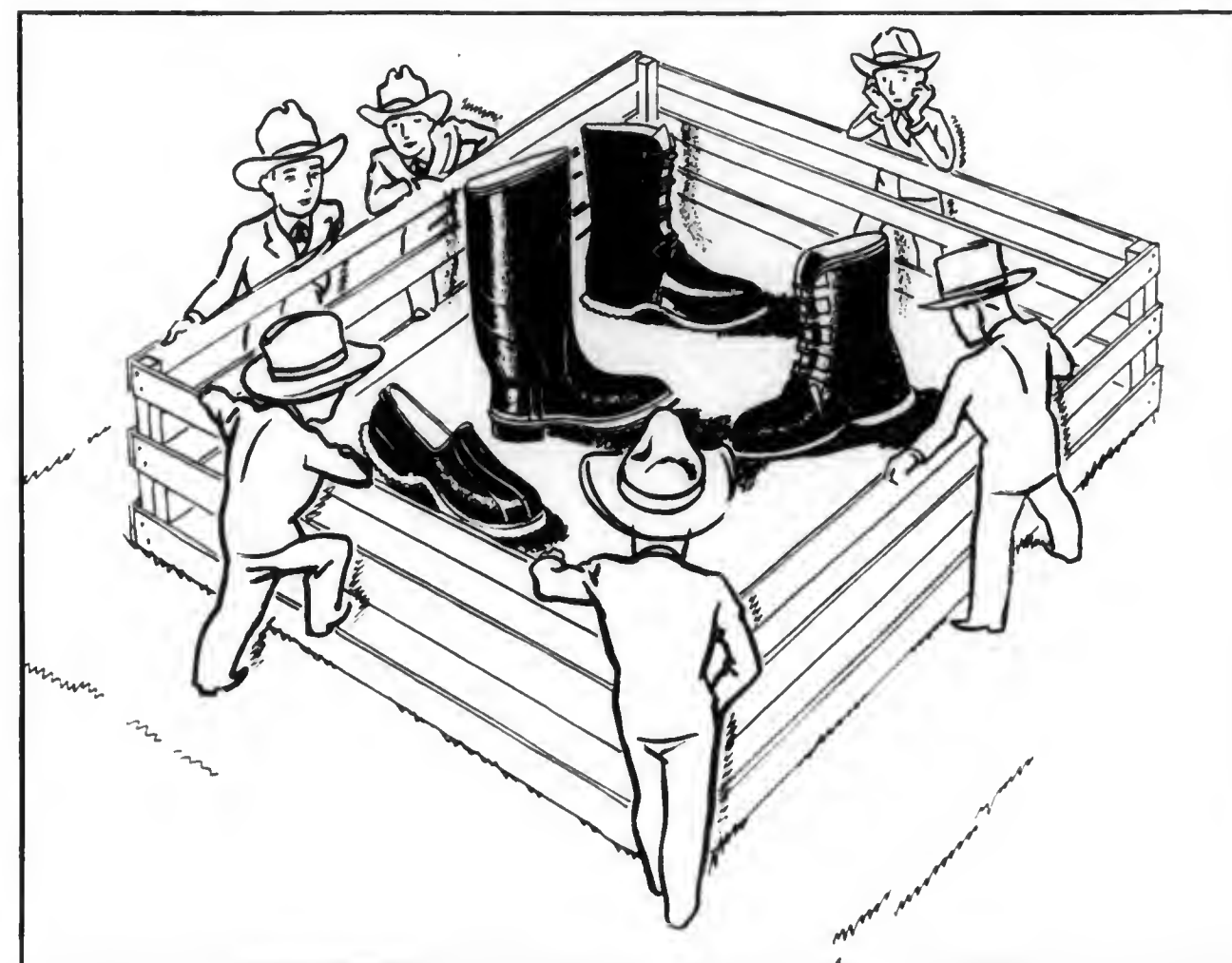
Price control? No, that is not what we are considering. It is a thing neither desirable nor attainable. To go back to our strawberry experience, extremely rapid ripening induced by very warm weather brought the heavy pickings that caused the panic which wrecked the market. By two days later exceptionally cool nights had cut pickings heavily. But the market lacked rebound. Dealers particularly were afraid to buy, they still felt that the country was full of strawberries.

Sometimes we are forced to sell below the cost of production. There is no question about that. Sometimes, perhaps, we think we must sell at prices below the cost of production. And it appears that there might be somewhat less of both of these evils if we growers knew just a little more about our costs of production. Possibly we then would have just a little more burning realization of what it all means when faced with the ever recurrent necessity of making decisions about price, to cut or not to cut.

Blue Ribbon stock? Be your own judge

Here are the rules for judging

1. Fit comes first. Make sure of a snug, comfortable feeling, leaving room for proper foot action. This means the boot should be shaped to the foot.
2. Make sure that the boot promotes foot health and comfort. Look for flexibility. Make sure there'll be no pressure on those large veins over the arch.
3. Examine carefully the workmanship and construction. A boot should be made of many parts, carefully fitted together for fit and comfort.
4. Get the boot in your hands. Twist it. Bend it. See that it snaps back into shape quickly—with life. Just another test for flexibility and comfort.
5. Look for reinforcements at the wear points. The prize-winning boot must wear well.



NOW that you've read the rules we'd like to take time out right here and make a sporting wager that you'll pick the "U. S." Blue Ribbon Boot to win, every time. Just like prize cattle—"Blooded stock, bred to wear the Blue Ribbon."

Since this isn't a livestock pen, we had to leave out the rules for examining the teeth and hoofs. But seriously speaking, you'll notice that the rules

call mainly for foot comfort and foot health in a boot.

Foot comfort and foot health are important. After all, your feet are your most valuable pieces of farm equipment. That's why, to the makers of "U. S." Blue Ribbon Eoots, fit is a prime consideration—so you can always be on the job with healthy, comfortable feet. The boot that's comfortable is the boot that fits!

Rubber footwear for the entire family. For work, dress and play.



Blue Ribbon Boots. Made on costly lasts, which duplicate the shape of your foot. They fit! Red uppers with white soles, black with white soles. Three lengths—tall, mid-calf, and low-cut.

Blue Ribbon Walkers. (All-rubber) you've never used the "U. S." Blue Ribbon Walker. Slip right over your leather shoe. A jiffy. Built to stand the hardest usage, or six buckles.

Gaytees for the modern farm. Catch your new coat with stylish Gaytees. With their many beautiful colors and fabrics, acclaimed by Paris style authorities. The Gaytees are utterly different from the many overcoats of other years. Smart in fabrics, in style, Gaytees come in cloth or uppers—in high or low upper, with snap quick-glide fastener, or 4 buckles. Look for "Gaytees" in the shoe.

Popular Keds. Star athletes everywhere choose Keds because they are so comfortable for the foot. They encourage young feet to healthy growth and the foot-protection every child needs.

"U.S." BLUE RIBBON



foot-saving footwear



Something else about foot comfort and health

We'd like to send you a little book entitled, "The Care of Farmers' Feet." It was written especially for the United States Rubber Company by Dr. Lelyveld, noted foot-specialist and Executive Director of the National Association for Foot Health. You'll find it mighty handy to have around the house.

All through the book you'll find interesting discussions on corns, bunions, ingrown nails, chilblains, itching feet, etc. Not only are the symptoms of various ailments explained—you'll find simple common-sense treatments suggested. Mail the coupon for your copy today. It's free!

United States Rubber Company,
Dept. FFF-110, 1790 Broadway, New York

Gentlemen: Please mail me your free book, "The Care of Farmers' Feet."

NAME _____
ADDRESS _____
TOWN _____
STATE _____



Cook Electrically and save time for other things

The Hotpoint electric range is one of the greatest time savers that electrical service brings to the farm home. It turns itself on and off, automatically, at exactly the time you have set. You needn't spend a minute in watching it—a wonderful saving of time for other things.

Its automatic temperature control does away with all the old uncertainty of baking and roasting. Canning work is greatly simplified and a real pleasure—with a Hotpoint. For large families and for farm use, Hotpoint ranges are made with extra-large ovens.

And there are a hundred other applications of electricity that save time, work, and money. Feed grinders,

for instance, and ensilage cutters, electric milkers and churns, all driven by General Electric motors, save hours of labor.

General Electric appliances heat and pump water; preserve food as well as cook it; wash, iron, and clean; light the house and barns brilliantly and economically. Even to the hidden wires and wall switches, you can depend on G-E quality and service.

Think about General Electric appliances and wiring in terms of economy—economy of labor and time and cost. Your power company will tell you all the details.

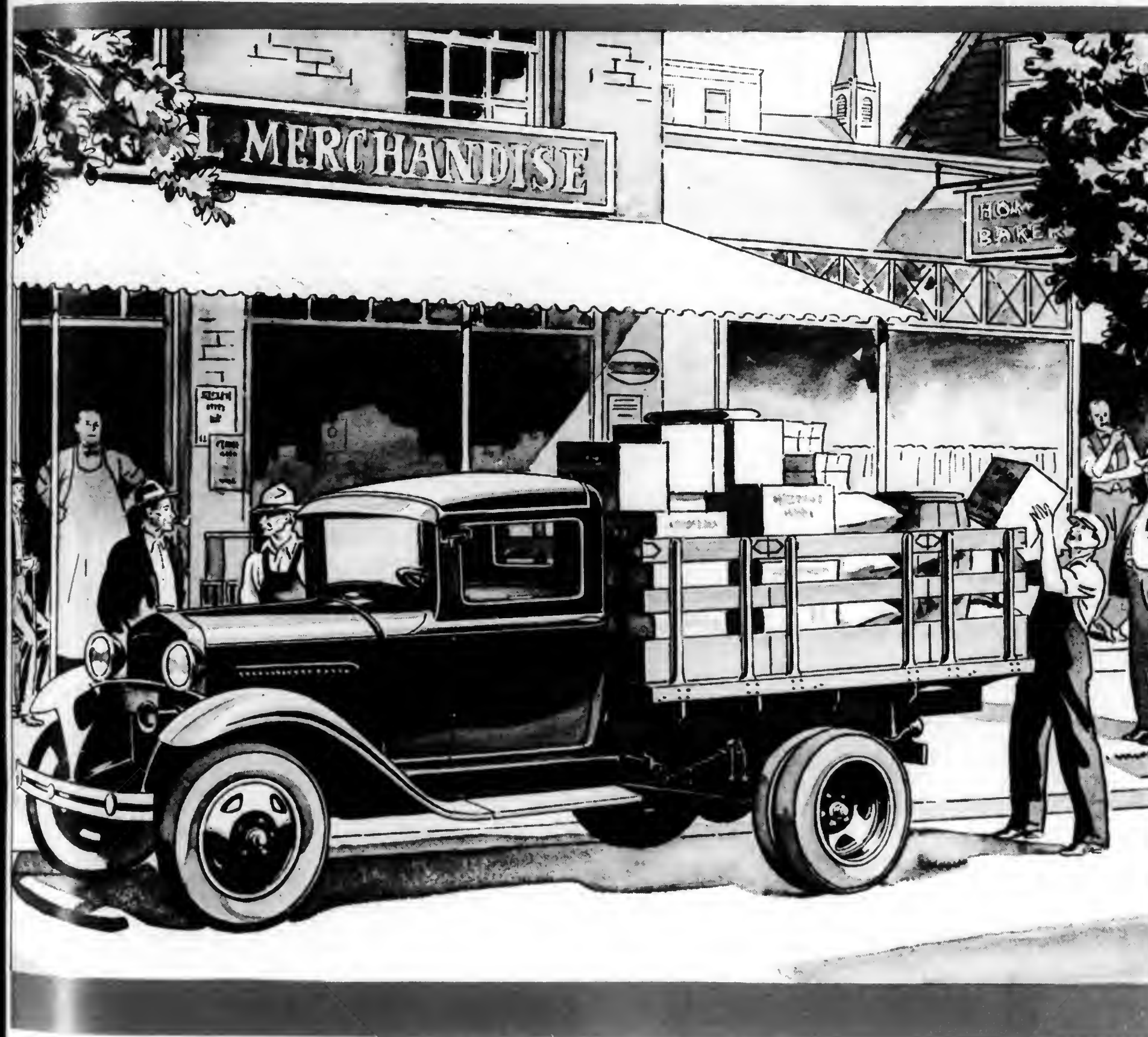
Send for the new booklet "Electric Helpers for the Farm." Address Room 315, Building 6, General Electric Company, Schenectady, N. Y.

GENERAL ELECTRIC

Join us in the General Electric program, broadcast every Saturday evening on a nation-wide N. B. C. network

A dependable worker
for busy days

THE FORD TRUCK



THROUGHOUT the year, at every season, the Ford 1 1/2-ton truck can serve you . . . with its steady and capable performance, with its capacity for long, hard work, and with a marked degree of economy that helps to lower expense.

The Ford is a sturdy truck, always ready and able to hurry a load to its destination, and to do it at low cost.

The Ford truck has a good engine. It develops its full 40 horse-power at 2200 revolutions per minute, which is but a medium engine-speed. Wear on moving parts is thus reduced.

In its construction, bearings and reciprocating parts are held to close limits of accuracy, by means of precision-gages in the hands of expert workmen. For

example, crankshaft main bearings and connecting-rod bearings of the engine are held to true-round within one-quarter of one-thousandth of an inch.

This and equal accuracy at other important points result in decreased wear, longer life, and greater value.

Features of the truck are the spiral bevel gear rear axle with straddle mounted pinion; the option of two gear-ratios; 4-speed transmission; power take-off opening; large brakes and heavy front axle and spring. Dual rear wheels are available at small additional cost.

Go to your Ford dealer, and let him show you at what low cost you can operate and maintain this truck on a farm.



DODGE DEPENDABILITY

TRUE ECONOMY IS MORE THAN PRICE-DEEP

Dodge Brothers oft-repeated statement, "The first cost is practically the last," today means more than ever before. For every fine feature of Dodge cars is even finer in the Dodge Six and Dodge Eight of today. » » And modern engineering advancements, such as safe, silent Mono-Piece Steel Bodies and weatherproof internal hydraulic brakes, add still more to their long life, low upkeep costs, lasting dependability and high resale value. » » Luxury, beauty and smooth, brilliant performance are yours in a Dodge Six or Dodge Eight . . . the greatest satisfaction at the lowest cost per mile.

MARATHON SHOWS OTHERS WHAT DODGE OWNERS ALREADY KNEW

Since July first, the Dodge Marathon Eight has crossed and recrossed the country many times. Under every condition of road and weather, this car is recording officially the stamina, dependability and economy with which all Dodge owners are familiar.

DODGE SIX, \$835 TO \$935 - DODGE EIGHT-IN-LINE, \$1095 TO \$1145, F.O.B. FACTORY

Dodge Eight closed cars are factory-wired for immediate installation of Transitone, the pioneer automobile radio. Other models will be equipped on order. Ask for a demonstration.



© 1930 by Dodge Brothers Corporation

November 15, 1930

In Switzerland

By H. C. KNANDEL

OUR train left Oberammergau about 8:00 a. m. Monday, August 18, for Munich—famous German city. The entire day was spent sightseeing. Considerable time was spent at the Alte Pinakothek where the paintings of Durer, Cranach, Altdorfer, Janssens, Rubens, VanDyck and Raphael were observed. In one room more than 90 paintings by Rubens are exhibited—the most famous being "The Slaughter of the Innocents" and the various Madonnas. "The Last Judgment" by Rubens is the largest picture on canvas in the world. We were told that Rubens painted a total of 1,500 pictures. Raphael's two Madonnas in this particular art gallery are "The Madonna Tempe" and "The Madonna of the Curtain." This artist began painting when but 22 years of age.

From Munich we took a special train for Lucerne, Switzerland. The first part of the journey was rather uninteresting, though we observed farms of larger size than during the two previous days. Again women were very active in the fields, plowing, harrowing and moving and in fact taking the places of men. Every now and then we could observe snow-capped mountain peaks.

Reforestation

Gradually we left the farming area behind us and as we journeyed toward Switzerland the mountain scenery became more beautiful. We passed about one end of Lake Constance and for miles huge forests of evergreens could be seen. Certainly Germany is going in for reforestation in a large way. We passed through a little strip of Austria as we were about to enter Switzerland.

We arrived at Lucerne, Switzerland, about 5:15 p. m. and what a marvelous city it is. Situated on the beautiful lake by the same name with rugged snow-capped mountains in the distance, the city is a mecca for tourists. There an old Roman wall built centuries ago can still be seen, the covered bridges in which many beautiful paintings are housed, and nearby is the home in which Richard Wagner, the great composer, once lived.

In the older part of the city one is astonished at the narrow winding streets, the profusely decorated buildings, many of the paintings having their foundation in Biblical literature. We visited the old hotel in which that great poet Goethe spent considerable time.

In the Alps

Some of us took advantage of an excursion up Rigi mountain. We left Lucerne by boat and at Vitznau took a piston railroad up the mountain side to Rigi Kulm about 6,000 feet above sea level. Here we had a magnificent view for 50 miles of the surrounding country. Switzerland scenery differs from that found on the North American continent in at least one respect. At the base is a lake, above which is farming area. Beyond this are the mountains and finally the snow-capped peaks. Pasture or grass land seems to unite the water with the snow-capped mountains.

From Lucerne we traveled by train to Interlaken where a short stop was made for dinner. Here a splendid view was had of the famous Jungfrau mountain with its permanent snow-capped peak. All along the ride could be observed high rugged mountains with their glistening snow-covered peaks and the beautiful green carpet of grass below. Here and there dotted along the mountain sides were the peasant homes. While few cows were observed, we were told that during the summer and fall months the cows are taken to the mountains and later brought down near the homes of their owners. Very few sheep were seen. All grass is cut with a scythe and as hay is raked by hand and carried to the very small barns.

PENNSYLVANIA FARMER

(447) 17



EGGS

are the best test of a laying mash

DO YOUR laying and breeding flocks produce smooth-shelled, well-shaped eggs, of high hatchability? And do your hens go into long, heavy production, keeping their vigor and health? If so, you are getting the kind of results that Amco Mashers give.

A good mash is essential to profitable production. A laying flock or a breeding flock needs plenty of proteins, vitamins, and minerals, in properly balanced amounts. It is the poorest kind of economy to skimp on egg-making materials, because your profits depend on eggs more than anything else.

Amco Egg Mash with Meatscraps comes up to scratch every time in producing eggs. If you have your own supply of milk, this mash will prove the most economical means you can take for profitable results. If you wish to feed milk but have no supply of your own, Amco Super Egg Mash (containing 100 lbs. dried buttermilk per ton) should be used. It contains an ample supply of this ingredient in its most practical form, and is designed to maintain body weight and vitality in flocks undergoing long, heavy production. These mashes may be had with or without cod liver oil mixed in.

The Amco Mashers are mixed on open formulas, so that you can see the amounts of each ingredient that goes into the mash. They have proved themselves in many ways, but most important, they have proved themselves thousands of times in actual practice, BY PRODUCING EGGS PROFITABLY.

Your nearest Amco Agent will supply you with these mashes at Amco's favorable prices.

Allied Mills, Inc.
Dist. Office, Muncy, Pa.
Gentlemen:

East Liverpool, Ohio
September 17, 1930

Our laying flock of 1,400 hens has been fed exclusively on Amco Super Egg Mash and Amco Scratch Grains. During the 12 months from September, 1929 to the end of August, 1930, their production has averaged 2066 dozen eggs per month.

We are very well pleased with our results.

Very truly yours,
J. WILLIS GASTON AND SONS

DISTRICT OFFICE: MUNCY, PA.



Colds in Poultry Quickly Banished

Wheezing, Rattling, Choking, Ends. Trouble Stopped in 48 Hours

Readers with colds in their flocks should read this letter from Thomas Pulliam, Shively, Ky. He says:

"I have had birds with their eyes closed from colds, and have saved them all. One cockerel was nearly dead. He lost 5 pounds. I gave him Group-Over and in two weeks he was full of pep and fighting every rooster on the place. Why do people let their birds die? It's so easy to save them with Group-Over."

It is amazing how quickly Group-Over cures colds in poultry. A few drops in the nostrils usually banishes every symptom overnight—while a little in the drinking water, as a preventive, guards the whole flock. For a liberal supply, send 50¢ or \$1 for the extra large size to Burrell-Duggar Co., 671 Postal Station Bldg., Indianapolis, Ind. As Group-Over is guaranteed to do the work or money refunded, it costs nothing to try.

Navy Brand Concentrated Buttermilk From Tuberculin Tested Cows
25 per cent milk solids, 6 per cent lactic acid, thick as custard with no foreign ingredients. Reduces the risk of disease and promotes fertility and hatchability. Good for chicks, broilers and laying hens. Sold direct from the factory in barrels of about 495 lbs. Half barrels, about 240 lbs. Write for prices.

TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, PA.

BROILER—RAISERS

SHIPPING CRATES LOANED FREE

SHIP YOUR LIVE BROILERS and other poultry to New York's Direct Live Poultry House. Since 1883, we are bonded commission merchants. Birds fed; returns made daily. Highest prices. Our output is unlimited. Inquire about us. Write for quotations, prices, rates, shipping instructions. Broiler Calendar, Folder F-2. KRKAUR POULTRY CO., Inc., West Washington Market, New York City.

ULSH'S Superior Chicks
White Wyandottes, White Rocks and Barred Rocks. Write for Fall & Winter prices. Hatches weekly the year round. 100% delivered, guaranteed. P.O. Box 222, JAS. E. ULSH, Box P, Beaver Springs, Pa.

ADVERTISEMENTS

are short-cuts to finding out truths. The truths about everything you want to buy. The names in advertisements are names of solid reputation. The labels in advertisements are symbols of satisfaction. It pays to read the advertisements for then you know what is good. The products they tell you about are being bought, tested constantly.

The fact that they're still being advertised is done proof of their worth.

Please Mention Pennsylvania Farmer When Writing to Advertisers.

THE YOUNG PEOPLE

On Our Way to California

By JANICE PURCELL

IN the September 20th issue of the Pennsylvania Farmer, I related the happenings of my vacation and I thought the boys and girls would like to hear about my return to my home in Long Beach, California.

My mother and I left on September 14th on the New York Central Railroad from my grandparents' home in Amherst, Ohio. Until dark we enjoyed the scenery. We saw Lake Erie for the last time, and many farms, and woods in autumn colors.

The train pulled into Chicago at 10 o'clock at night. A redcap gathered up our baggage and we rode on a bus to the Santa Fe depot. When we got on the train our berth was all made up. We both were very tired and were asleep when the train started at 11 o'clock.

Monday morning we found ourselves in Missouri. Eating breakfast while riding along is wonderful. We found that out when we breakfasted in the diner. The scenery we saw that day was delightful. Fields of orchard and yellow flowers, large farms, grain elevators, and green trees and grass were only a few things that we saw in Kansas. We were fortunate enough to see the Missouri River that day.

Indian Superstitions

Passing through a corner of Oklahoma in the night, we arrived in Texas Tuesday morning. The only things to see there were level land and little towns. It did not take us long to cross that part of the country for that was the Texas Panhandle. The train stopped for breakfast at Clovis, New Mexico, where we ate in a Harvey House, which is a restaurant where the trains stop regularly at meal time for the people to get off and eat. The diner was not attached to the train after we left Kansas.

In New Mexico we saw the Indians who were selling souvenirs. On Tuesday night we bought some pottery from a Pueblo Indian. The scenery of New Mexico was very different from that of the states that we had passed through before. It was very mountainous and rocky. While riding in New Mexico and Arizona we saw many Indian huts with adobe baking ovens out in the open. We saw many houses built in the cliff, which reminded one of the cliff dwellers.

We passed through almost all of Arizona in the night, but got to see some of it on Wednesday morning. After passing over the Colorado River and into California we also bought some souvenirs from the Mojave Indians that were there. It was very difficult to take a picture of them, for they are very superstitious.

On to Mexico

We arrived in Los Angeles, California, Wednesday afternoon, September 17th, at 5:45. Daddy was there to meet us and we surely were glad to see him. He said he had a surprise for us and this surprise was a new car. We had a twenty-two mile ride to Long Beach and everything looked familiar when we reached home.

We thought our traveling was over but we were mistaken, for next day we drove down to Ensenada, Mexico. It was a drive of about 200 miles. Ensenada is a typical Mexican town situated on the ocean. While there we saw many adobe huts, a Mexican cemetery and little burros being driven down from the mountains with firewood on their backs.

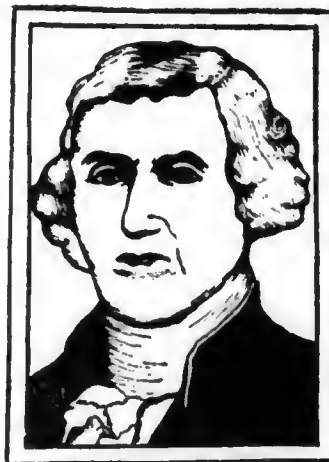
We returned to our home in Long Beach on September 21, having been in Ohio, Indiana, Illinois, Missouri, Kansas, Oklahoma, Texas, New Mex-

ico, Arizona, California and Mexico, all in five days.

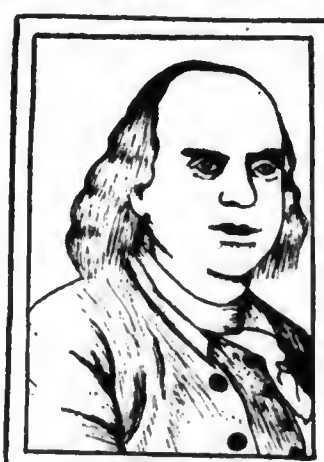
The next day I started to school in grade 7A after having spent the most enjoyable vacation a girl could ever wish for. Janice Helen Purcell, California.

Who Are They?

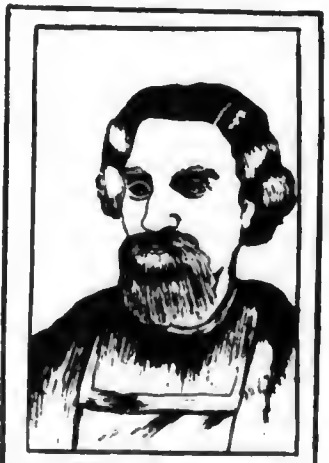
"NOW that we are having a historical contest," writes Fred Pollock of Pennsylvania, "why not have some of our famous men in the columns?" So Fred kindly sent us



No. 1



No. 2



No. 3



No. 4

Historical Contest

THIS IS THE FINAL LIST

- Who is the present Secretary of the Treasury?
- Name the state flowers of—
Maryland.....
New Jersey.....
West Virginia.....
- Pennsylvania has no chosen flower. What do you suggest?
- What is Pennsylvania's motto?
- What is Pennsylvania's area in square miles?
- In what state is Yellowstone National Park?
- What is the smallest state in the Union?
- Name the thirteen original states.
- How much did the United States pay for Alaska?

After you have answered all the questions in the four lists mail them, with your story on "Why I Am Glad to Be an American" to Young People's Editor, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

Name
Address
Age

free-hand drawings of four well-known men. How many do you recognize?

Two book prizes will be given to the readers who send in the correct names, accompanied by a short poem about any one of the four great men.

All letters must be in this office before November 22. Address Young People's Editor, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

A STATE EXAMINATION

The following questions are to be answered by abbreviations of the states. Evelyn Cox of West Virginia is the author of the list.

1. A young girl.
2. A number.
3. A crowd.
4. Father.
5. To be sick.
6. To cut grass.
7. Monday's work.
8. Used in a flood.

Watch for answers next week.



Janice Helen Purcell and Sheppy as they looked this summer when Janice spent her vacation at her grandfather's farm in Ohio.

ANSWERS TO LAST WEEK'S PUZZLE

1. Sweet pea.
2. Lavender.
3. Carnation.
4. Goldenrod.
5. Heliotrope.
6. Marigold.
7. Aster.
8. Petunia.
9. Violet.
10. Geranium.
11. Mignonette.

Little Folks

Timmy Twitchet's Summer Home

By RUTH PLUMLY THOMPSON

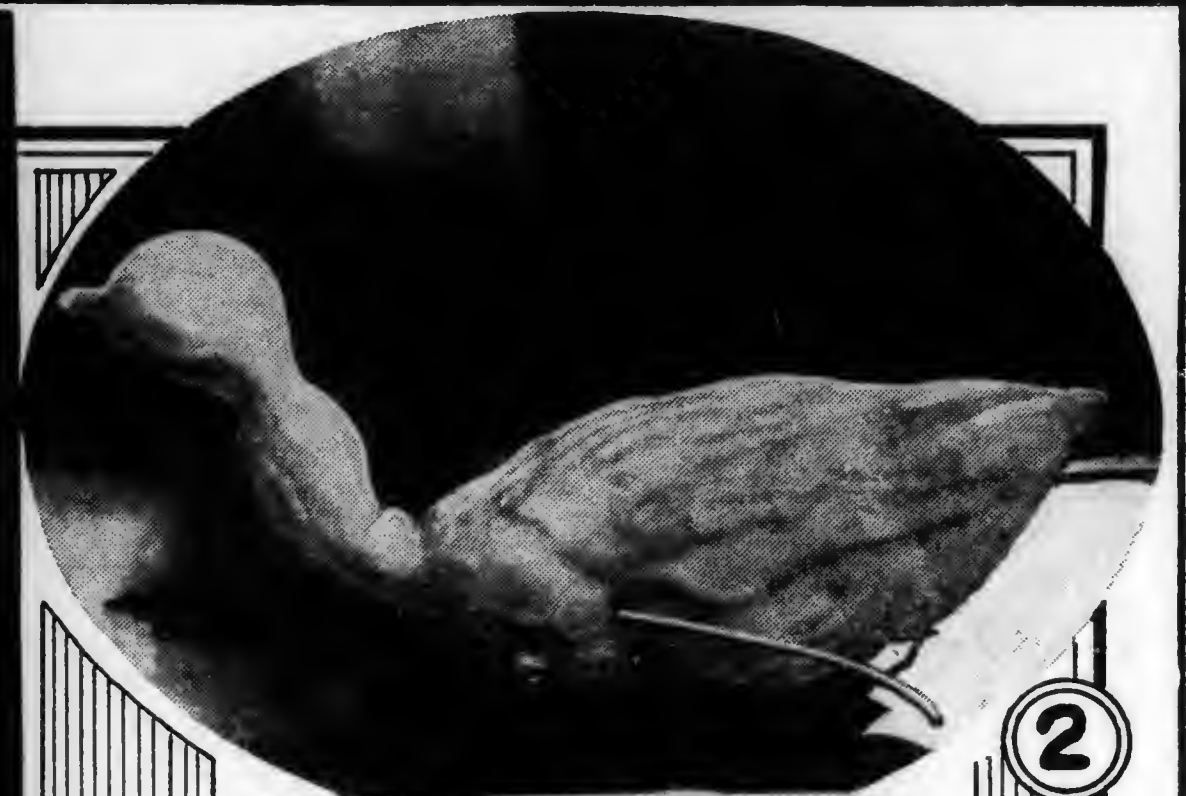
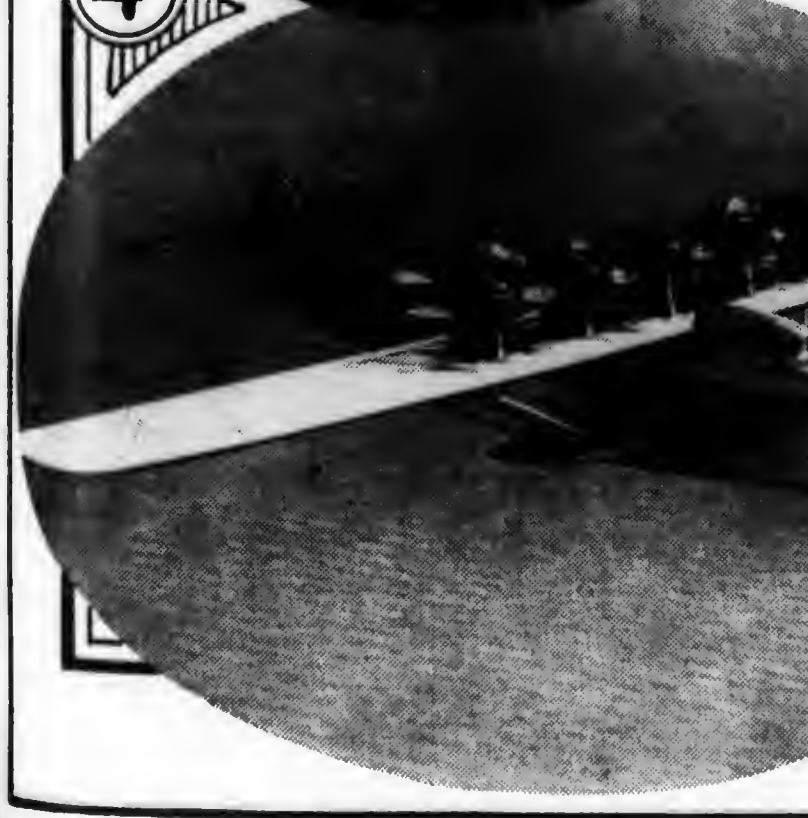
"HAVE you made any plans for the summer, Tim?" asked Bobby Grey as the two mice gentlemen sat cozily smoking together in Timmy's front parlor. Bobby, a handsome mouse bachelor, like the Mayor, himself, was one of Timmy Twitchet's best friends and they spent many an evening earnestly discussing politics or cheese. "You can't beat this old doll house for winter quarters," mused Bobby looking admiringly around the comfortable parlor, "but the attic is rather stuffy in July."

"Yes," agreed Timmy Twitchet, taking the mouse cigar from his mouth and blowing three rings toward the ceiling, "it is. But I'm not going to spend the summer in the attic, Bob. I expect to spend July and August in the air." Timmy Twitchet winked provokingly but not another word would he squeak. After twenty or thirty unsuccessful attempts to discover what he meant, Bobby Grey went off in a huff slamming the doll door behind him and muttering crossly about people who thought themselves so clever! Nevertheless, Bobby stopped five or six places before he returned to his apartment in the old flower pot and by morning every mouse in the village knew that Timmy was to spend the summer in the air. The young lady mice were especially thrilled and kept running over to Timmy's with minced paper preserves and cracker crumb pies in the hope that he would tell them more about his vacation. But Timmy was never home and his old mouse housekeeper only shook her head mysteriously when they questioned her about Timmy's plans.

On the last day of June, Timmy turned over his duties as Mayor to Tiny Wee the village carpenter who always spent the summer in the attic repairing the little mouse dwellings and stores. Then, after carefully closing his house, Timmy shook paws with his housekeeper who was to spend two months with her niece in the shoe box, and stepped jauntily down the main mouse street of the village. In one hand he carried his neat cardboard candy box suit case, in the other hand, his cane. A little mouse porter followed with his camp bed and chair.

(To be continued.)

PASSING EVENTS IN PICTURES



1. Boston, Mass.—Photo shows Mrs. Wilma Hoyal, new president of the American Legion Auxiliary, and Ralph T. O'Neill of Topeka, Kansas, who was elected new National Commander of the Legion to succeed Col. O. L. Bodenhamer.
2. Huntington, W. Va.—This freak of nature appears to be a duck, but it is in reality an odd-looking sweet potato. It was grown by H. P. Taylor on his farm here.
3. Mono Lake, Cal.—Photo shows baby gulls ready to fly on their own. Mrs. Frasher (holding the birds) is the wife of the intrepid Sierra photographer who is the only successful one in obtaining pictures of the colony.
4. New York City.—Mrs. Carrie Chapman Catt, winner of the 1930 "Achievement Award" of \$5,000, "given annually to the American woman who has contributed most to the national life in letters, art, science, philanthropy or social welfare."
5. Friedrichshagen, Germany.—The giant DO-X plane which is scheduled to start across the Atlantic this week. It has already made the first part of its journey from Germany.
6. "The Last Mile" in the dead letter office. What happens to letters and circulars which are so poorly or improperly addressed that not even skilled workers of the Dead Letter Office of the Post Office Department at Washington are able to locate the person to whom they are addressed and which carry no return address, reach their final fate in this furnace. Photo shows a Postal official consigning a batch of "dead letters" to the flames.



(Copyright by Underwood & Underwood.)

It's raining EGGS out our way

By "OUT OUR WAY" we mean the farm of Dr. Hess & Clark, Inc., Ashland, Ohio, where Dr. Hess Poultry Pan-a-min is put on trial for egg production. And by "raining eggs" we mean egg production like we show here.

The two pens of 100 hens each shown below have just finished a production test of a year. One pen laid a total of 13,148 eggs—the other 14,940! Both pens laid a lot of eggs, as you can see. But the one pen laid 1792 more eggs than the other—and that's some difference! What made this big difference in production?

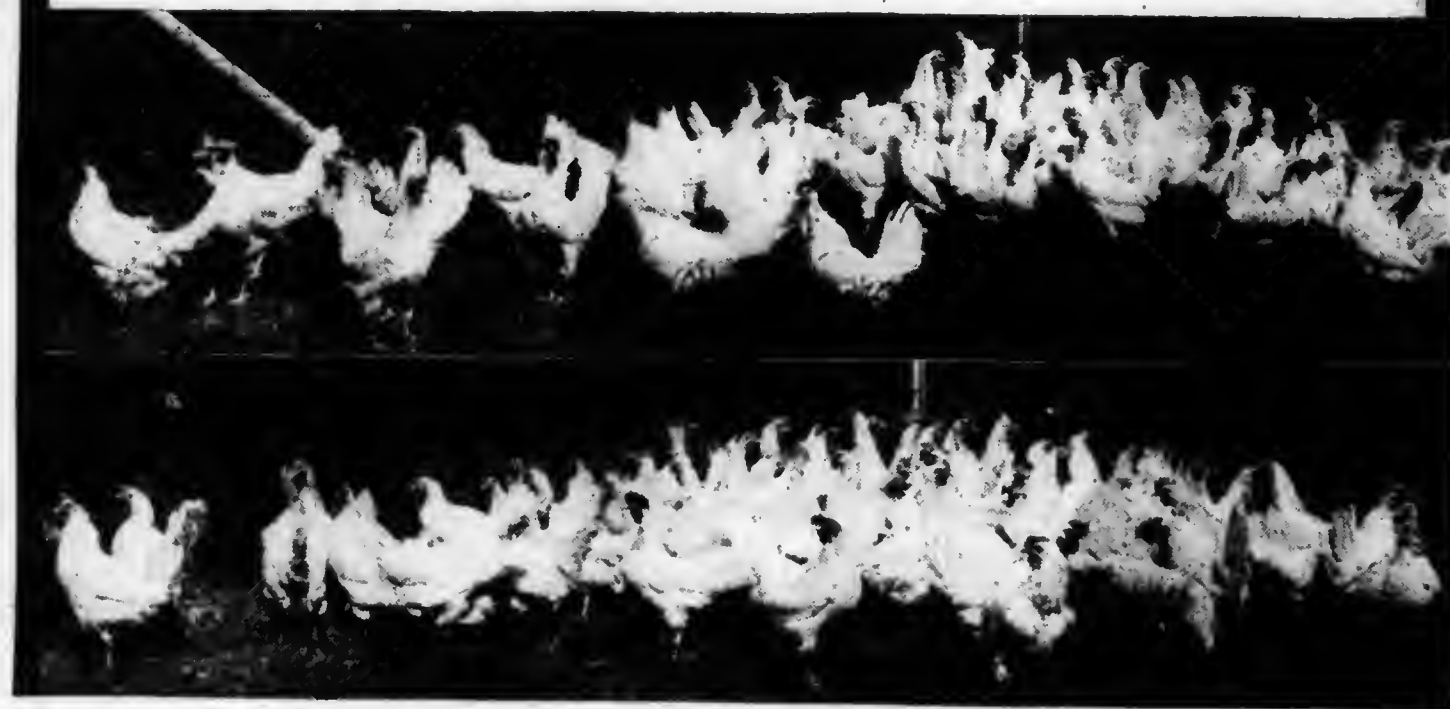
The hens in both pens were selected from the

same brood and divided as evenly as possible. No variation there. Both pens were given exactly the same feed and care, so this had nothing to do with the difference in production. There was one difference between the two pens—one and only one. The pen that laid the most eggs by a wide margin received Dr. Hess Poultry Pan-a-min in addition to good feed and care. That and that alone accounts for the 1792 more eggs they laid.

What Pan-a-min did for these hens to give them the edge was keep them in top condition day after day. It kept their bodies in order and their egg-machinery working. It gave them minerals for substance and energy.

Put your hens in "laying trim" with Dr. Hess Poultry Pan-a-min—and keep them that way this winter while egg prices are up. Pan-a-min pays in eggs the year 'round. See your Dr. Hess dealer or write us. Dr. Hess & Clark, Inc., Ashland, Ohio.

**The ration we gave these two pens of hens was composed of a good mash and a good scratch feed balanced, mixed, and blended for egg production. They received the best care that hens could get. But no matter what the feed or the care, Dr. Hess Poultry Pan-a-min will keep the egg baskets higher every time.*



Dr. Hess **PAN-A-MIN**
Poultry keeps hens in laying trim

Seeds of Ideas

For full value—buy standard products. Manufacturers stand back of advertised goods.

ADVERTISEMENTS are selected seeds of ideas planted in the soil of your mind. If cultivated thoughtfully, these ideas will produce greater comforts and better methods of accomplishing your aims. These selected seeds of advertising can help you to live more fully at less cost.

The advertisements in this publication are a record of what the manufacturers are doing for you. They will give you many new ideas and will tell you what you want to buy. And they will help you get the most for your money.

The advertisements are news. They are interesting. Form the habit of reading them carefully and regularly. It will pay you to keep informed of the daily progress of business.

Poultry Problems

Effects of Roup

I bought some pullets this summer and when they came they had roup. Their eyes were shut and all with yellow cheese-like stuff. They rattle in the throat.

We smoked them with pine tar on hot bricks for about three weeks and caught them and cut all the matted feathers from under their wings where they had put their heads and necks, and then rubbed pine tar under their wings and dipped their heads in disinfectant. Also gave Epsom salts.

Most of them look better but some continue to have it. Is there anything we can do to get them over it? Will they ever amount to anything?

Mrs. Norman H. Baker,
Somerset county, Pa.

THE care you have been giving your pullets should in time overcome the roup. I don't know of any positive cure for this disease. We can merely give treatments and remedies which aid the bird to cure itself.

Your pullets, once they recover from the roup, will doubtless be all right in the main, although some birds will have been so badly weakened that they will never be good producers, and should of course be discarded from the flock. Give your birds the best of care, and once the roup has run its course, I think that they will come into production.

R. L. S.

Hens Have Corns

Please tell me what ails my rearing hens. Some of them get a swelling on their feet. It looks like a corn, but it does not come from a bruise. They get pretty lame, but it doesn't seem to hurt them.

Westmoreland Co., Pa. John F. Fox

THE corns you mention seem pretty common in fowls at this season. They can be helped by picking out the hard core with the point of a knife, squeezing out any matter which may be present and painting with iodine or mercuric iodine, repeating the treatment as often as necessary.

R. L. S.

Pick-Outs

Did you ever have any trouble with White Leghorn pullets picking each other? If one of my pullets lays an egg on the floor or ruptures itself, the others eat everything out. My pullets are six months old and are in good laying condition. If I keep them in half a day or more they do it worse. I would like to keep them in to keep up the production. Rudolph Arboret, Lehigh county, Pa.

THE troubles you mention are very common and once started are hard to control. An overfat condition, constipation and in some cases worms may cause these troubles. Some poultrymen use barley to replace part of the corn in the scratch feed, claiming that the change will help matters if the birds tend to be too fat.

In case of constipation, a dose of one pound of Epsom salts per 100 birds in the drinking water will take care of that. If you think that your birds have intestinal worms, it would be advisable to give them treatment. There are many different kinds of pills for this purpose.

R. L. S.

Chemistry of Feeds

How can I obtain information about feed, viz., what are the carbohydrate, proteins and vitamins in commercial feeds? Wm. Erbberg

NUTRIENTS in feeds fall under three general classes: carbohydrates, which include the sugars and starches, which are found in the various grains, such as wheat and corn, and furnish heat and energy or are converted into fat in the body; fats, which may be considered a concentrated form of carbohydrate, and come from vegetable oils and animal fats; and protein, a complex substance containing nitrogen, which is essential to body growth and replacement of worn-out tissues. Protein may be of vegetable or animal origin, coming from such products as grain, oilmeal, milk or meat scrap. A fourth

class is ash or mineral, including lime, phosphorus, iron, silicon and others. Vitamins are substances found in various feeds which are essential to the well-being of the bird. Vitamin A, found in the germ oil of yellow corn and in high-grade cod-liver oil, promotes growth. D, a constituent of cod-liver oil, promotes bone growth. E, found in wheat germ meal, lettuce and the leaves of legumes, is important in the reproductive activities. Vitamins B and C are either present in common feeds or not necessary to poultry, but the other three are important in poultry management.

R. L. S.

Deplumed

My old hens are laying well but they pick the feathers off their necks and backs and sunburn red. I couldn't sell them, they were so ragged.

Wicomico county, Md. Mrs. H. O. H.

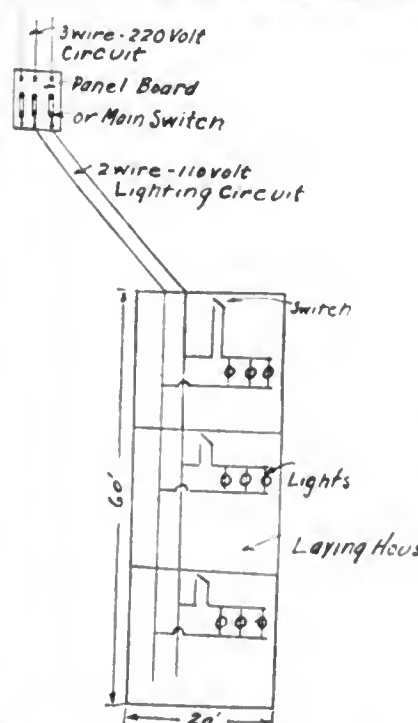
IN regard to the loss of feathers in your birds, this may have been caused by the work of the depluming mite. The remedy is to make a mixture of sulphur one part and unsalted grease five parts, and use this as an ointment around the affected parts.

R. L. S.

Poultry House Wiring

WE have an inquiry from a reader in which he says, "I have a three-wire circuit, 220 volts, which I would like to run into my laying house. The laying house is divided into three rooms. I would like to know which wires to use to get 110 volts lighting circuit in this house. I would appreciate a wiring diagram so as to have switches in each room of the laying house."

The accompanying diagram shows how to take two wires of the three from the 220-volt circuit at the panel board or main switch to the laying house. The center wire is neutral and when put in circuit with either one of the other outside wires secures 110-volt lighting circuit. This wiring diagram has been prepared with switches in each room of the laying house.

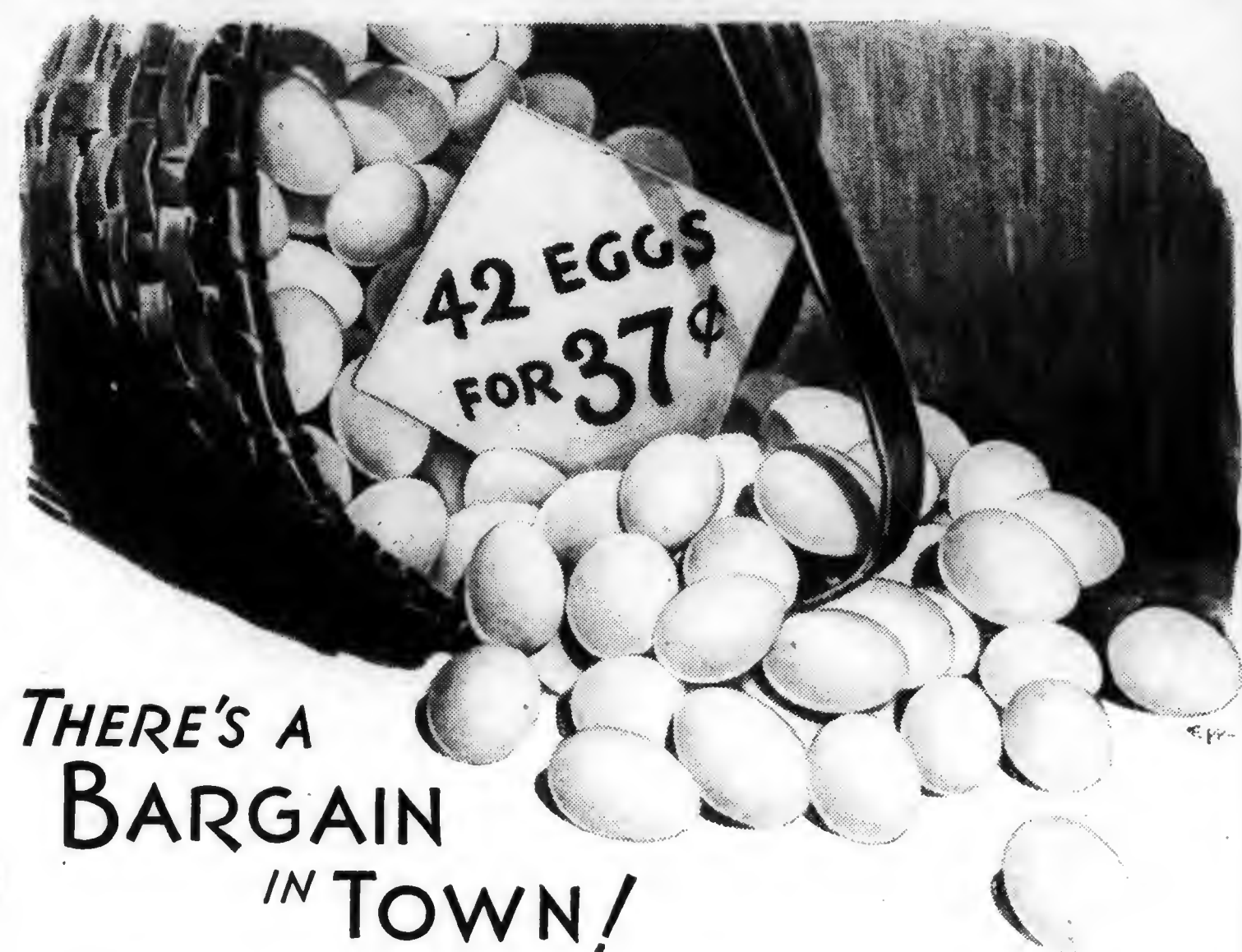


The switch wires could all run to one place if that arrangement would be more satisfactory and convenient.

For lighting only possibly No. 14 wire would be the size to use for the lighting circuit in the laying house; in fact, all the way back to the panel board. However, it would be advisable to use either No. 12 or better No. 10 for the future heating loads. It might be desirable to operate water heating elements or even small electric heaters in extremely cold weather. The No. 14 wire would be too small for heating loads.

Knob and tube wiring is a good system if installed according to best practice. It is recommended that any one doing or having any wiring done get in touch with the power company, which is usually glad to have an opportunity to advise any one about wiring. After all, the power company cannot give good service through improperly designed wiring circuits.

R. U. B.



42 Eggs for 37c. This bargain is in your very town... in a bag at The Store With the Checkerboard Sign. In this bag are 100 pounds of Purina Laying Chows... in this bag are 42 more eggs than are in the average bag of more than 125 other feeds. This bag of Purina Laying Chows costs an average of 37c more than the average bag of these other feeds. 42 eggs for 37c. These are figures which come from thousands of poultry yards like yours. These are figures gathered in the 1929 national survey of 3,007,718 hens... a survey covering 48 states... a survey conducted by 870 men... a survey still going on.

When you buy feed for your layers you are buying eggs in a bag. Consider, then, what a bargain you get in a 100-pound bag of Purina Laying Chows... 239 eggs... almost 20 dozen... all in 100 pounds of feed. 42 of these eggs are extra... 42 eggs which cost 37c... less than 12c per dozen... what a bargain!

Glance at today's price of eggs. Compare it with eggs at less than 12c per dozen. A bargain it is... a bargain which is all yours when you feed Purina Laying Chows. Any hour you happen into town this bargain will be waiting for you... at The Store With the Checkerboard Sign. Purina Mills, 998 Gratiot Street, Saint Louis, Missouri.

THE
PURINA
POULTRY CHOWS

CHICKEN CHOWDER
(mash... for eggs)
LAY CHOW
(mash... for eggs)
HEN CHOW
(scratch... for eggs, for growth)

STARTER CHOW
(mash or all-mash... for chicks)
CHICK CHOW
(scratch... for chicks)
GROWER CHOW
(mash... for growth)



Starts Hens Laying

Here's a New Way to Get Eggs in Winter. Costs Nothing to Try

Mrs. C. H. Wagner, Milwaukee, Wis., has a real idea for chicken raisers who are not getting plenty of eggs. She says:

"On Nov. 1st, our 150 pullets were not laying. I gave them Don Sung and got 261 eggs in the next 2 weeks! Sold \$15 worth in December, and 450 worth in January. The birds were strong and healthy all winter, and cackled like it was spring."

Don Sung, the Chinese brand of tablets which Mrs. Wagner took, are opening the eyes of chicken raisers all over America. These tablets can be obtained from Don Sung, Inc., 1320 The Postal Station Bldg., Indianapolis, Ind. Poultry raisers whose hens are not laying well should send 50 cents for a trial package for \$1 for the extra large size, holding 3 times as much. Don Sung is positively guaranteed to do the work, or money refunded, so it costs nothing to try. Now is the time to start giving Don Sung to your hens, so you will have a good supply of fresh eggs all winter.

Write today. FREE. TRUSLOW POULTRY FARM, Inc., Chester, Md.

Weather-Proof Your Flock

Check items you want, we will send illustrated folders and full information. Mail today.

Check items you want, we will send illustrated folders and full information. Mail today.

Check items you want, we will send illustrated folders and full information. Mail today.

Check items you want, we will send illustrated folders and full information. Mail today.

The pedigree of quality goods

Every stockman knows the value of pedigrees. A cow whose dam and sire have a good record is more likely to become a high producer than one of unknown lineage. Likewise the merchandise you buy to fill the weekly needs of your home and farm, should have a pedigree, a name that stands for established worth. In a true sense, the advertising pages in this farm paper are a record book in which you can find a list of the most reliable goods on the market.

These advertisements are inserted by reputable firms who offer you the products you need on the single basis of giving you a dollar's worth of quality for every dollar spent. They are honest statements, for the advertiser knows that he could not remain an advertiser were he to misuse the printed page.

Farmer's Business Letter

At a time when most farm and factory products are showing a poor return and business in general is depressed, livestock is doing surprisingly well from the standpoint of the producer, with prospects regarded as favorable. That the livestock dollar is worth as much to the farmer as it was last year is the conclusion appearing in a publication of Armour's Livestock Bureau. Ranging livestock prices alongside prices of all commodities, it is found that:

"There has been no great drop in the livestock producers' ability to buy other commodities, in spite of the decline in the absolute level of livestock prices. For accompanying the drop in livestock prices has come the drop in prices of all commodities. Consequently, each livestock unit at current prices will buy essentially the same amount as at this time last year, about the same as the average for five years 1925-1929, and far more than at any time during the period 1921 through 1924. In fact, each unit of livestock owned at the present time will bring about 20 per cent more in terms of other commodities than the average for the 1921-1924 period."

Fewer Cattle and Higher

An upward swing in the cattle market this week was gratifying to producers. Prices on good to choice heavy steers were 50 cents to a dollar above a week ago, and other kinds were about 50 cents higher. Top heavy steers brought \$13.35 against \$12.50 last week, and top yearlings \$13.75 against \$13.60 last week. The advance was due to very light receipts.

The railroads are continuing their policy of promoting the consumption of good beef, taking the champion load in the Omaha stock show, at \$20.00, and buying other lots of prize cattle. Of late years they have taken about a third of the International fair cattle, and by serving this beef in their lines, and advertising it, they are properly credited with good service to producers. The champion single steer in the Omaha show brought 97 cents a pound. Dan Casement of Kansas showed the champion carlot, and R. P. Lamont, Jr., of Colorado, the champion single steer. Here follows in both cases:

Hogs Hold Well

Quality of hogs continues unusually good, and weights are running a little heavier. Corn is a short crop, but of excellent quality, and washy hogs, usual with the feeding of the first corn, have been noticeably absent. Pork loins went off one to two cents this week, now being quoted wholesale at 16 to 19 cents, but in spite of that the market held up well, due to lighter runs and a strong shipping demand. Eleven markets had 491,000 hogs this week, against 561,000 last week, and 574,000 the same week last year. The eleven market run was smaller than for any corresponding week since 1920. Average price of hogs this week was \$9.10, against \$9.15 last week and the same a year ago.

Trade was light in the futures market and prices about steady with last week. Light weights brought \$8.80 for January delivery, and medium weights \$8.90 for January and \$9.25 for March.

Lambs Advance

It is the beginning of the annual in-between season in the lamb market, westerners being pretty well in and the fed-western not yet starting to come in large numbers. Each year sees the same condition. Thus this week total receipts took a big slump and the close of the week saw lambs selling 25 to 30 cents higher than a week previous. Top westerns brought \$8.75, a gain of 45 cents over last week, and top natives \$8.75, 25 cents up from last week. Breeding ewes are not plentiful, and the market holds strong. Good yearlings are selling at \$8.00 to \$8.50, and two to four-year-olds at \$8.50 to \$9.00. Demand for feeding lambs is the strongest of the season, and the supply the smallest. White face feeders are bringing up to \$7.25, with only plain kinds selling at \$6.50 and below on recent sessions.

Grain Still in Rut

In the grain markets it is a time when the usual price factors seem to be ignored. Part of this is due to the general feeling of depression and part to the Farm Board holdings and their possible disposition. As for some time past, traders are afraid to commit themselves, and the market merely marks time from day to day. Trend

in wheat was on the weak side and market closed a couple of cents lower. Oats off a little, and corn a cent and a fraction higher, not important enough changes to talk about.

Important Marketing Case

An important livestock marketing case is up for hearing in St. Louis under the Packers and Stockyards Administration of the federal government. The case involves most of the old-line firms and one cooperative firm, who are defendants, being charged with boycotting two subsidiaries of the Farm Board and one private firm. Testimony is expected to proceed for some time before a decision is reached, when the case may go to court.

Feeder Movement

During October the ten leading markets shipped \$72,864 feeder sheep and lambs to the country, a decrease of 40 per cent as compared with a year ago. For the ten months of the year the movement to the country shows a decrease of 29 per cent as compared with the same period last year.

In the case of cattle, the October movement from eleven markets totaled 589,610 head, a decrease of 9 per cent against October last year. For the ten months of the year the total is 2,119,291, a decrease of 7 per cent compared with the same period last year. Of late, demand for feeding cattle has strengthened, as the prospect is regarded as favorable.

Business Reports

Business reports are of special importance at this time. Not much that is encouraging comes out from week to week. Steel is down. Reports on pig iron production for the month of October showed a 40 per cent drop from a year ago. Of 95 lines of business in New York, only one was better, 24 were equal to a year ago, and

70 were below. For August, Federal Reserve index of employment stood at 83.8, compared with 79, the low point of 1921. Economists point to reduction of inventories as one of the favorable signs of the times, arguing that when buying picks up the factories will have to work full time to renew depleted stocks. It is noticed, even by casual shoppers, that store stocks are low, and it is sometimes difficult to find even staples in wearing apparel and other things. This is the case also in food lines, thus on November 1 large stocks in Chicago were only a little more than one-fifth as large as a year ago. The election, apparently, is to have no effect on business, one way or the other.

Chicago, Nov. 8, 1930 Watson

Produce Market Review

THE Philadelphia market was firm on fresh eggs and prices advanced 2 to 3c on all grades. Receipts of both nearby and western stock were very light and were insufficient for the demand. Most dealers were working on refrigerator processed stock in the absence of fresh receipts.

Trading on refrigerator eggs has been restricted considerably since the majority of buyers are anxious to use their own holdings before purchasing on the open market. Many dealers are inclined to think that such stocks are going to be out of the way in the near future, which will result in more active market trading. On account of this belief some dealers are unwilling to move large blocks of refrigerators at prevailing prices, although occasional cars of April stored eggs were reported sold at 23 1/2 to 24c and at the close of the week some dealers would not accept 24c for fancy April packed stock. Small to medium sized lots were bringing as high as 26c.

Processed Pacific Coast refrigerator eggs were moving fairly well at 33 1/2 to 34c in wholesale lots. There was a fairly active demand for cheap storage stock

around 20c. Fresh untreated Pacific Coast was slow sale around 55c. Nearby selected whites sold at 52 1/2 to 53c with henries up to 60c. Browns brought 45 1/2 to 46c, mixed colors 40 1/2 to 41c, western browns 45 1/2 to 46c, whites 48 1/2 to 50c, mixed colors 43c and ordinary stock 30 1/2 to 35c.

The New York egg market was stronger with the best quality nearby white and brown eggs advancing about one cent per dozen. Nearby henry whites ranged from 30c for pulled eggs up to 57c for closely selected extras. Nearby brown eggs brought 45 1/2 to 46c and mixed colors 20 1/2 to 25c according to quality. Pacific Coast white eggs sold at 30 1/2 to 35 1/2c.

Poultry Irregular Receipts of live poultry in New York were fairly liberal and the demand was irregular. Early in the week the demand was slow, in the middle of the week it improved and at the close it was again unsatisfactory. Buyers were looking for the fancy grades and prices on these held firm. The best grades of Leghorn fowl brought 15 1/2 to 18c per pound, with a few lots up to 20c. Colored fowl ranged from 20 1/2 to 26c. Leghorn chickens sold at 20 1/2 to 22c. Reds at 21 1/2 to 23c and Rocks at 23 1/2 to 25c. Ducks brought 18 1/2 to 25c and squabs 30 1/2 to 35c per pair.

Dressed poultry held steady with a fair demand. Broilers sold at 25 1/2 to 30c, chickens at 24 1/2 to 30c, fowls at 20 1/2 to 24c and nearby turkeys at 34 1/2 to 40c.

Butter Irregular The butter markets were irregular and prices fluctuated. Ninety-two week butter closed about 1 1/2 to 1 3/4c per pound lower than at the opening of the week. Dealers sold freely in order that they might prevent accumulations but on the other hand buyers were very conservative and purchased for immediate needs only. Jobbers and large distributors with consumer outlets complain of the light demand for butter.

Practically all of the potato markets were steady and the demand showed some improvement. Shippers were somewhat lighter and the cooler weather helped trading to some extent. It is not likely that prices will show any material advance in the next few weeks since slight advances in price will bring heavier shipments. October shipments this season have been the lightest since 1928.

The government crop report will be released November 10th and the opinion of the trade is that there will be no reduction in the estimated crop. The uncertain condition of the market has resulted in less speculative interest and there have been fewer potatoes stored than in a normal year. This means that the bulk of the shipments so far have gone into consumption.

General Prices The general price range of Maine and Pennsylvania potatoes in Eastern markets was \$1.75 to \$1.90 per 100-pound sack. There were very few sacked potatoes arriving in Philadelphia by rail and truck receipts were fairly liberal. It looks as though many Pennsylvania growers have marketed the poorer lots and are holding the better stock for higher prices.

Apple markets were dull both in the cities and at shipping points. Shipments have dropped off to some extent but supplies in the city markets were fairly ample for the limited demand. There has been practically no change in apple prices in Philadelphia and New York during the past month. The best stock has sold around \$1.50 per bushel with some lots running up to \$1.75. On the other hand there have been fairly large quantities that have sold at prices between 50c and \$1.25. Apples have been selling at around \$4 per barrel at shipping points in the Potomac-Sheep-Andover Valley.

Sweet potato markets have shown some improvement and receipts have been lighter. Prices in Philadelphia are averaging about 10 1/2 to 11c higher than at the close of October. Prices of New Jersey sweets averaged somewhat higher in New York. W. R. W.

Produce Quotations

PHILADELPHIA

Butter—Higher than extras, 41 1/2 to 44c; 92 to 40c; 90 score, 35c.
Eggs—Fancy select, 55 1/2 to 56c; extra firsts, 54 1/2 to 55c; seconds, 53 1/2 to 54c; 3000.
Poultry—Live fowls, 10 1/2 to 24c; broilers, 15 1/2 to 18c; old roosters, 15 1/2 to 18c; pigeons, pr. 15c; ducks, 15 1/2 to 18c; turkeys, 25 1/2 to 32c.
CRANBERRIES, N. J., 1/2 bbl. boxes, 50c; varieties, small, \$2.50 to 2.75.
Vegetables—ANISE, N. J., bus, 50 1/2 to 60c.
CARROTS, Pa. & N. J., bus, 15 1/2 to 20c.
CABBAGE, N. J., 1/2 bbl., 20 1/2 to 25c.
CAULIFLOWER, N. J., 1/2 bbl., 15 1/2 to 20c.
CELERY, N. J., 1/2 bbl., 15 1/2 to 20c.
EGG PLANTS, N. J., 1/2 bbl., 15 1/2 to 20c.
KALE, Pa. & N. J., 1/2 bbl., 15 1/2 to 20c.
LETTUCE, N. J., crates, Big, 25 1/2 to 30c; Small, 25 1/2 to 30c.
MUSHROOMS, Pa., 3-lb. bus, 15 1/2 to 20c.
PARSNIPS, Pa., 1/2 bbl., 15 1/2 to 20c.
SPINACH, Pa. & N. J., 65 1/2 to 70c.
TOMATOES, Pa., hot-house, per lb., mostly 15c.
TURNIPS, Pa. & N. J., 1/2 bbl., 15 1/2 to 20c.
SWEET POTATOS, N. J., 1/2 bbl., 15 1/2 to 20c.
POTATOS, Pa., 100-lb. round whites, No. 1, \$1.75 to \$1.90.
INTERCRESS, Va. & Pa., 30 1/2 to 35c per bushel.

NEW YORK

Butter—Higher than extras, 39 1/2 to 41 1/2c; firsts, 35 1/2 to 37 1/2c; 90 score, 35c; 80 score, 34 1/2c.
Eggs—White, nearby and nearby western, 55 1/2 to 56c; extra firsts, 54 1/2 to 55c; extra second, 53 1/2 to 54c; average extras, 15 1/2 to 16c; mediums, 15c.
Vegetables—APPLES, bbls., 25 1/2 to 30c; CRABAPPLES, 25 1/2 to 30c; CRABAPPLES, 25 1/2 to 30c.
BEETS, State and Jersey, 1/2 bbl., 40 1/2 to 45c.
CABBAGE, nearby, crt., 15 1/2 to 20c.
CARROTS, State, cut bkt., 75 1/2 to 80c.
CELERY, 100-bunch, \$1.50 to \$2.50.
CAULIFLOWER, Cuts, 1/2 bbl., 15 1/2 to 20c.
CELERY, State, crt., 75c to \$2.
JERSEY, crt., 25c to \$1.50.
PARSNIPS, bbl., 15 1/2 to 20c.
PEPPERS, 100-bunch, 15 1/2 to 20c.
SPINACH, crt., 15 1/2 to 20c.
SQUASH, crt., 15 1/2 to 20c.
TOMATOES, Jersey, 100-bunch, 15 1/2 to 20c.
TURNIPS, 100-bunch, 15 1/2 to 20c.
INTERCRESS, 100-bunch, \$1.50 to \$2.
POTATOS, 100-lb. bag, \$2.50 to \$3.

LANCASTER

Butter—Country butter, 45 1/2 to 50c; cream, 45 1/2 to 50c.
Eggs—White, 55 1/2 to 56c; firsts, 54 1/2 to 55c; 90 score, 53 1/2 to 54c; 80 score, 52 1/2 to 53c.
Poultry—Chickens, \$1.25 to \$2.25; broilers, 15 1/2 to 18c; old roosters, 15 1/2 to 18c; pigeons, pr. 15c; ducks, 15 1/2 to 18c; turkeys, 25 1/2 to 32c.
CRANBERRIES, N. J., 1/2 bbl. boxes, 50c; varieties, small, \$2.50 to 2.75.
Vegetables—ANISE, N. J., bus, 50 1/2 to 60c.
CARROTS, Pa. & N. J., bus, 15 1/2 to 20c.
CABBAGE, N. J., 1/2 bbl., 20 1/2 to 25c.
CAULIFLOWER, N. J., 1/2 bbl., 15 1/2 to 20c.
CELERY, N. J., 1/2 bbl., 15 1/2 to 20c.
EGG PLANTS, N. J., 1/2 bbl., 15 1/2 to 20c.
KALE, Pa. & N. J., 1/2 bbl., 15 1/2 to 20c.
LETTUCE, N. J., crates, Big, 25 1/2 to 30c; Small, 25 1/2 to 30c.
MUSHROOMS, Pa., 3-lb. bus, 15 1/2 to 20c.
PARSNIPS, Pa., 1/2 bbl., 15 1/2 to 20c.
SPINACH, Pa. & N. J., 65 1/2 to 70c.
TOMATOES, Pa., hot-house, per lb., mostly 15c.
TURNIPS, Pa. & N. J., 1/2 bbl., 15 1/2 to 20c.
SWEET POTATOS, N. J., 1/2 bbl., 15 1/2 to 20c.
POTATOS, Pa., 100-lb. round whites, No. 1, \$1.75 to \$1.90.
INTERCRESS, Va. & Pa., 30 1/2 to 35c per bushel.

YORK

Butter—Country, 40 1/2 to 45c; separator, 50 to 55c.
Eggs—White, 55 1/2 to 56c; firsts, 54 1/2 to 55c; 90 score, 53 1/2 to 54c; 80 score, 52 1/2 to 53c.
Poultry—Chickens, \$1.25 to \$2.25; broilers, 15 1/2 to 18c; old roosters, 15 1/2 to 18c; pigeons, pr. 15c; ducks, 15 1/2 to 18c; turkeys, 25 1/2 to 32c.
CRANBERRIES, N. J., 1/2 bbl. boxes, 50c; varieties, small, \$2.50 to 2.75.
Vegetables—ANISE, N. J., bus, 50 1/2 to 60c.
CARROTS, Pa. & N. J., bus, 15 1/2 to 20c.
CABBAGE, N. J., 1/2 bbl., 20 1/2 to 25c.
CAULIFLOWER, N. J., 1/2 bbl., 15 1/2 to 20c.
CELERY, N. J., 1/2 bbl., 15 1/2 to 20c.
EGG PLANTS, N. J., 1/2 bbl., 15 1/2 to 20c.
KALE, Pa. & N. J., 1/2 bbl., 15 1/2 to 20c.
LETTUCE, N. J., crates, Big, 25 1/2 to 30c; Small, 25 1/2 to 30c.
MUSHROOMS, Pa., 3-lb. bus, 15 1/2 to 20c.
PARSNIPS, Pa., 1/2 bbl., 15 1/2 to 20c.
SPINACH, Pa. & N. J., 65 1/2 to 70c.
TOMATOES, Pa., hot-house, per lb., mostly 15c.
TURNIPS, Pa. & N. J., 1/2 bbl., 15 1/2 to 20c.
SWEET POTATOS, N. J., 1/2 bbl., 15 1/2 to 20c.
POTATOS, Pa., 100-lb. round whites, No. 1, \$1.75 to \$1.90.
INTERCRESS, Va. & Pa., 30 1/2 to 35c per bushel.

PITTSBURGH

Butter—Standard, 32 1/2 to 34c; extra, 35c to 36c.
Eggs—White, 55 1/2 to 56c; firsts, 54 1/2 to 55c; 90 score, 53 1/2 to 54c; 80 score, 52 1/2 to 53c.
Poultry—Chickens, \$1.25 to \$2.25; broilers, 15 1/2 to 18c; old roosters, 15 1/2 to 18c; pigeons, pr. 15c; ducks, 15 1/2 to 18c; turkeys, 25 1/2 to 32c.
CRANBERRIES, N. J., 1/2 bbl. boxes, 50c; varieties, small, \$2.50 to 2.75.
Vegetables—ANISE, N. J., bus, 50 1/2 to 60c.
CARROTS, Pa. & N. J., bus, 15 1/2 to 20c.
CABBAGE, N. J., 1/2 bbl., 20 1/2 to 25c.
CAULIFLOWER, N. J., 1/2 bbl., 15 1/2 to 20c.
CELERY, N. J., 1/2 bbl., 15 1/2 to 20c.
EGG PLANTS, N. J., 1/2 bbl., 15 1/2 to 20c.
KALE, Pa. & N. J., 1/2 bbl., 15 1/2 to 20c.
LETTUCE, N. J., crates, Big, 25 1/2 to 30c; Small, 25 1/2 to 30c.
MUSHROOMS, Pa., 3-lb. bus, 15 1/2 to 20c.
PARSNIPS, Pa., 1/2 bbl., 15 1/2 to 20c.
SPINACH, Pa. & N. J., 65 1/2 to 70c.
TOMATOES, Pa., hot-house, per lb., mostly 15c.
TURNIPS, Pa. & N. J., 1/2 bbl., 15 1/2 to 20c.
SWEET POTATOS, N. J., 1/2 bbl., 15 1/2 to 20c.
POTATOS, Pa., 100-lb. round whites, No. 1, \$1.75 to \$1.90.
INTERCRESS, Va. & Pa., 30 1/2 to 35c per bushel.

FEED MARKET

The following quotations are for transit and are subject to change without notice. They are for the U. S. Bureau of Agriculture. They show the approximate cost of feed per ton (all in 100-lb. bags) and grain per bushel in carlots or in draft lots delivered on track at Philadelphia and Scranton rate points.
Corn, 25 1/2 to 27 1/2c; standard middlings, 28 1/2 to 30c; cottonseed meal, 38 1/2 to 40c; gluten feed, 38 1/2 to 40c; No. 2 yellow corn, 24c; No. 2 white corn, 24c; No. 2 yellow corn, 24c; No. 2 white corn, 24c.



Bob Lee grinding roughage and grain with his Letz Mill No. 344. The exhaust fan blows the feed right into his grain bin. There is a size of Letz Roughage Mill for every farm. A Letz Mill is profitable on a farm of four or more dairy cows, turkeys or more calves, or as many hogs or sheep. Also ideal for preparing rations for poultry.

Bob Lee says:
"I make my own balanced ration out of my own crops—right on my own farm with a Letz Roughage Mill"

Over a hundred thousand farmers (like Bob Lee) save themselves from buying ready-mixed feeds and from running short in the spring by making the best use of home-grown crops through the help of a Letz Roughage Mill. This is how the Letz Mill saves these farmers from buying feed:

(1) Cuts and recuts roughage—stems and leaves—until the entire hay or fodder crop is readily eaten by every head of stock on the place.

(2) Grinds all grain and roughage so that stock can get all the good out of it—making this grain and roughage more palatable, and more easily digested.

(3) Thoroughly mixes the ground roughage and the ground grain into a palatable, nutritious, balanced ration. The Letz Mill and one man do all these three jobs quickly and thoroughly in one operation. Or, if you like, it will do any one of them separately.

The hay in your barn, the corn in your crib, the fodder in your field—turn them into a balanced ration—a mixed feed as good as you buy in a bag from the feed store. Turn your home-grown crops into a ration that will get you the most in milk and meat. Cut your costs by feeding your home-grown crops. Ask a dealer to let you try a Letz Mill.

The coupon will bring you, without cost, our home-grown ration booklet. This booklet tells you how thousands of farmers are reducing costs with a Letz Roughage Mill. Mail coupon today!

LETZ
AMERICA'S LEADING FEED MILL
LETZ MANUFACTURING COMPANY
1135 East Road, Crown Point, Indiana

Please send me your free booklet that shows how to turn home-grown crops into balanced rations for cattle, horses, hogs, sheep and chickens, and tell how thousands of farmers have profited by using the Letz Roughage Mill. I am now feeding:

Dairy Cows _____ Horses _____ Steers _____ Hogs _____ Sheep _____ Pigs _____
My name is _____
My mailing address (on R.F.D.) is _____
City _____ State _____

Farm homes that are castles

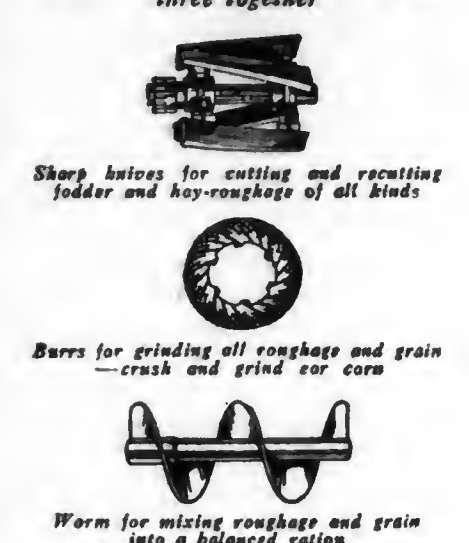
You can tell the farm home which is a castle in the proper sense of the word. Not a mansion to be sure. But always imposing, impressive. Large, sunshiny rooms in the midst of broad acres and open fields. Expansive of ground, fresh country air. Neat trimmings and landscaping which add dignity to the house.

You know before you enter that the owner has a certain soundness of thinking usually called business sense. Always on guard against waste. And usually the housewife tells you that thrift—care and scrutiny at the time of buying—bought those extras which make the inside seem so complete. For, she adds, they read the advertisements.

You can beautify your home—make a real castle out of it—with money saved in buying advertised goods. When you buy merchandise advertised by name, you get purchase value in the greatest degree of every dollar spent.

It pays to read advertising

ALL IN ONE MACHINE
Cuts, grinds, mixes—does one at a time, does any two at a time, or all three together



Sharp knives for cutting and recutting fodder and hay-roughage of all kinds

Bars for grinding all roughage and grain—crush and grind for corn

Worm for mixing roughage and grain into a balanced ration

- 1 Increase the feeding value of home-grown crops a fourth to a half by recutting, grinding and mixing them into palatable, well-balanced rations.
- 2 Make home-grown feed go farther and save the expense of buying ready-mixed feeds.
- 3 Enable a farmer to feed a fourth to a half more stock on the same number of acres.
- 4 Reduce the cost of production of milk and meat 25 to 50 per cent and keep livestock healthier.
- 5 Cut the cost of farm work through fewer operations and less labor at feeding time.

these three jobs quickly and thoroughly in one operation. Or, if you like, it will do any one of them separately.

The hay in your barn, the corn in your crib, the fodder in your field—turn them into a balanced ration—a mixed feed as good as you buy in a bag from the feed store. Turn your home-grown crops into a ration that will get you the most in milk and meat. Cut your costs by feeding your home-grown crops. Ask a dealer to let you try a Letz Mill.

The coupon will bring you, without cost, our home-grown ration booklet. This booklet tells you how thousands of farmers are reducing costs with a Letz Roughage Mill. Mail coupon today!

LETZ
AMERICA'S LEADING FEED MILL
LETZ MANUFACTURING COMPANY
1135 East Road, Crown Point, Indiana

Please send me your free booklet that shows how to turn home-grown crops into balanced rations for cattle, horses, hogs, sheep and chickens, and tell how thousands of farmers have profited by using the Letz Roughage Mill. I am now feeding:

Dairy Cows _____ Horses _____ Steers _____ Hogs _____ Sheep _____ Pigs _____
My name is _____
My mailing address (on R.F.D.) is _____
City _____ State _____

Farm homes that are castles

You can tell the farm home which is a castle in the proper sense of the word. Not a mansion to be sure. But always imposing, impressive. Large, sunshiny rooms in the midst of broad acres and open fields. Expansive of ground, fresh country air. Neat trimmings and landscaping which add dignity to the house.

You know before you enter that the owner has a certain soundness of thinking usually called business sense. Always on guard against waste. And usually the housewife tells you that thrift—care and scrutiny at the time of buying—bought those extras which make the inside seem so complete. For, she adds, they read the advertisements.

You can beautify your home—make a real castle out of it—with money saved in buying advertised goods. When you buy merchandise advertised by name, you get purchase value in the greatest degree of every dollar spent.

It pays to read advertising

FEED DRIED MOLASSES BEET PULP AND MAKE MONEY

No other supplemental feed can add to your profits like Dried Molasses Beet Pulp. It blends perfectly with other feeds—it makes the whole ration work harder for you. As a milk producer it has no equal.

Dried Molasses Beet Pulp is all of the sugar beet after extraction of sugar. As a pure succulent, vegetable food it makes a highly palatable ration. Dairy cows, beef cattle and sheep relish it. In the stomach it swells to 5 or 6 times its own bulk, loosens up the mass of feed and insures perfect digestion of the entire ration. No feed is wasted.

Fits Any Ration

Dried Molasses Beet Pulp may be used in a variety of ways. It supplements pasture, replaces silage, corn and other carbohydrate feeds. Where hay is short or high priced, 6 pounds of Dried Molasses Beet Pulp will do the work of 10 pounds of hay and do it better.

Order Now

The demand for Dried Molasses Beet Pulp has always exceeded the supply—thousands of dairymen, cattle and sheepmen are feeding it. Prices are low. See your dealer and place your order now.

Shipments made direct from factory located nearest to buyer. Write for free booklet "Profitable Feeding" The Larrowe Milling Co. Dept. PF 4 DETROIT MICHIGAN



NATIONAL CARBIDE SALES CORP.
Lincoln Building New York, N. Y.



1872-1930 Fifty-eight years of Satisfaction



The Tornado Dry Fodder Cutter Strong, Durable, Mechanically Built. Not continually breaking, cuts finer. Puts fodder in better feeding condition than any cutter in America.

Write us today. The W. R. HARRISON CO. Manufacturers Massillon, Ohio

Farm and Dairy

By L. W. LIGHTY

A CENTRAL Pennsylvania man tells me he has a bunch of very fine shots. To sell them now means sacrifice, as the supply is great, but he has little corn and asks if I think it would be wise and profitable to feed them wheat. He never fed wheat to hogs and is fearful of results.

First I will say I never had a bunch of thrifty shots that did not make me a little money if I fed and handled them properly. It seems nearly impossible to lose money on thrifty shots unless they die.

Wheat will practically take the place of corn as a grain feed for growing shots to be slaughtered. It worked out this way in my feeding and of late several experiment stations have reported wheat a superior pork maker. It is understood that we use wheat as we use corn, not exclusively. When we feed corn to growing shots we feed skim milk if we have it. Lacking this we feed some ground oats, linseed meal and tankage. Just the same when we replace corn with wheat.

As a rule we feed corn in the ear, but the best method of feeding wheat is to grind or crush it before feeding. Without doubt our inquirer and many others will turn the 65c to 70c wheat into profitable pork the next five months.

Wheat for Calves

I always fed and advised others to feed corn to young calves with the milk they get. As far as I know the results were always satisfactory. The question now is put to me whether wheat would replace corn for the calves. No it will not, and I advise against it. No other feed ever replaced corn for this particular purpose.

I would pay the price for the corn and not risk the wheat.

These Times

I never got so many doleful letters as in the last two months. I admit conditions have been in a degree discouraging on many farms and we have reason to do some complaining, but to date I have to learn of the first farmer's family that does not have plenty of work and also plenty to eat. But I know numbers of city friends who have no work or so very little that they are now living on short rations, and the winter is before them with all the expenses thereof.

Those city friends like the grasshopper in the old fable made scant provision for the "rainy day," but why should the farmer moan when his potato bins are full and the kraut stand is loaded to the brim, cans are filled waiting to be opened and the swine, the poultry, the cattle will supply meat, milk and eggs? I have been there for a mighty long while and I am not guessing.

I am not unkindful that the sheriff is a very busy man, but his helper informs me much more than half of his business is in town. A few days back the assessor told me farmers as a rule were putting in improvements. A number put up silos, others large poultry houses and some built houses or barns or improved the old ones.

I am sure the farmers on the whole feel that their condition is better than that of any class in these times of universal stress and my candid advice to the writers of the doleful letters is to look things squarely in the face and realize that after all they are the most favored citizens and have much to be truly thankful for.

Cow-Testing Ass'n Reports

Lebanon County
THE Lebanon County Cow-Testing Association finished its second year with 23 whole-year and two part-year members. There were 537 cows in the Association during all or part of the year. The results for the two years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1929	369.56	8335	311.3
1930	383.38	9334	337.3

Nineteen herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Lbs. Milk	Lbs. Fat
Frank Heilmann & Son	R.G.H. & M.	11486	395.4
J. H. Scholtz	R.H.	11431	389.9
M. H. Bennich	R.H.	11547	385.5
Hubert S. Miller	R.H.	11068	384.1
Robert B. Royer	R.A.	10009	373.9
Frank Fernster	R.H.	10802	368.7
Harry B. Bomberger	R.J.	7117	351.8
Fairview Farms	R.G.	7257	350.0
Levi Wolfe	R.H.	10376	348.9
Ralph S. Heisey	R.H.	9339	348.3
Wayne Keller	R.G.H.	10532	343.2
Wm. D. Boeshore	R.G.G.	7104	339.7
Harry D. Spittler	R.H.	9336	338.0
C. C. Gingrich	R.G.H.	9833	330.6
C. E. Gingrich	R.G.H.	9942	328.1
Samt. R. Wengert	R.G.H.	9920	320.4
Jacob H. Arnold	R.H.	9885	319.9
C. C. Gingrich	R.H.	9526	314.3
David K. Bomberger	R.H.	8828	311.7

Jacob N. Smith, A. C. Berger, Testers, County Agent.

Allegheny County

THE Allegheny County Dairy-Herd Improvement Association finished its sixth year with 22 whole-year members. There were 429 cows in the Association during all or part of the year. The results of the Association for the six years are as follows:

Year	Av. No. Cows	Lbs. Milk	Lbs. Fat
1925	382.24	7773	282.7
1926	433.32	7946	304.3
1927	375.29	8528	327.2

Seventeen herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Lbs. Milk	Lbs. Fat
Robt. Bamford & Son	R.J.	9005	450.0
Farmhill Dairy	R.G.	8400	440.4
Fairacres Farm	R.G.	8391	432.5
Dundee Farm	R.G.	8503	432.2
Croala Farm, Inc.	R.H.	12054	410.1
J. F. Byers	R.G.	7841	390.2
Arnold Farm	R.G.	7759	377.4
Levi A. Park	R.G.H.	10955	377.1
Ardaya Herd, Inc.	Mixed	8664	374.1
Red Gate Farm	R.G.	7435	363.8
Guy A. McWreath	R.H.	11342	363.6
Lewis A. Park	R.G.	6661	351.3
R. M. Donaldson	R.A.	8708	345.1
Kehn Bros.	R.G. & J. & M.	6905	313.6
Bell Bros.	R.H.	10811	337.2
E. J. Link	R.H. & M.	9206	322.9
Allegheny Co. Home	R.H.	9803	313.2

R. W. Ryerson, Henry R. Eby, Testers, County Agent.

Southern Huntingdon

THE Southern Huntingdon County D. H. I. A. finished its first year on August 1, 1930, with 24 whole-year members. The total number of cows for the whole or part of the year were 343.

Nine herds with an average of five or more cows exceeded an average production of 300 lbs. of butterfat. A complete list of these herds follows:

Owner	Breed	Lbs. Milk	Lbs. Fat
Amos Yoder	G. & M.	8750	400.9
Tom Byler	G.H.	10830	370.7
Wm. L. Brown	R.G.H.	9190	365.7
W. H. Kennedy	G.H. & M.	8985	318.2
Ray F. Brown	R.G.H. & G.G.	8905	341.2
R. R. Byler	R.G.H.	8874	331.3
I. N. Yoder	R.G.H.	9553	325.2
P. J. R.	R.G.H.	8099	312.2
Fred Brown	G. & R. & M.	8256	302.0

Wilber Bently, R. S. Clark, Testers, County Agent.

DAIRY CATTLE

CRAWFORD COUNTY, PENNA.

—Can Supply Your Needs in Cows—
We now have a large barn to house your milk cows and test them if necessary. Located in the main line of the Erie Railroad, 24 hours service to New York City, 30 hours to New Haven and Philadelphia. Plenty of springs and fresh cow all breeds, available.

Crawford Co. Cooperative Dairy Improvement & Sales Ass'n, Market House, Meadville, Pa.

Ayrshires. 4 nicely marked good bull calves, from our show herd, ages 4 to 8 months. Prices range from \$20.00 to \$40.00. Registered. Can spare a long range of very reasonable, which was Junior Champion at Houding and 6 other shows.

MAPLE CROFT FARMS, Tyrone, Pa.

AYRSHIRES All ages and both seasons—calves, from C.T.A. registered—sire out of a 681-lb. dam—price reasonable. **ROBERT S. ROYER,** Farm near Prescott, R.D. 1, Lebanon, Pa.

AYRSHIRE CATTLE of the best blood lines. Herd T. B. Accredited. Animals of both sexes and all ages. **Geo. B. McCannell,** Wellington, Pa.

Reg. Guernsey Bull, 3½ yrs. old. Gentle, quick sure breeder, sired by grand sire of Ne Plus Ultra, also out of grand daughter of King of the May. Also young bulls, one to twelve mos. old, dam, accredited herd. **Jacob Shank,** Hazlet, Pa.

REG. GUERNSEY BULL, 3 years old, for sale. One bull calf, born Oct. 20, for sale of calves. No Border Hilder considered. **F. E. Miller,** Box 20, Armstrong, Pa. Bull Price \$1.00.

Registered Brown Swiss Bulls, three months old. Herd T. B. Accredited. Write your needs. Reasonable prices. **F. S. Golden,** Penn Run, Pa.

Holstein Bulls for sale, from an accredited herd, from calves to service bulls. The 1000-lb. bull and 4½ bull. Also females. **Crystal Spring Stock Farm,** Littlestown, Pa.

For Sale Four Registered Holstein cows with calves, \$25 each. **ELY FARM,** Bridgeville, Pa.

SHEEP

REG. SHROPSHIRE and SOUTHDOWN RAMS good individuals. They will please you. Both championships on Shropshires at three state fairs this fall. **Hyland Farm,** Beaver, Pa.

A few **Southdown Rams** for sale. Address **W. U. NOBLE,** Boston, Summit Co. Ohio.

HAMPSHIRE RAMS—A good 2½-year-old, also year and well grown Ram lambs Canadian bred. **O. E. MAHAN,** Cortland, Pa.

For Sale Rams of heavy C. Type. Delmar, Melrose, Mattson and C. Type. Combined. **Leo R. Scott & Sons,** Burgettstown, Pa.

SWINE

Chester Wh. Pigs 8 weeks old. \$10.00. Pedigree and pure. **Ing pigs \$3.50.** Write for free price list. **C. L. Taylor,** Wyandung, Pa.

Reg. Big Type Chester Whites, all ages. Sire wt. 1,104 lbs. Write for free price list and pedigree. **W. H. Gorman,** Beech Creek, Pa.

LOW PRICE on Big Type pedigree pure-bred, pigs and bred sows. Champs, blood, pure. Please. **C. E. Cassel,** Hershey, Pa.

Feeding Pigs 15 to 50 lbs. \$4.50 to \$5.00 each. Pure. Truck delivery on large lots. **Wm. Poland-Chinas,** Stanley, Pa.

PIONEER HERD—POLAND-CHINAS of approved blood lines. Service sows, bred sows, piglets. You will want a look in at this splendid herd. Satisfied purchasers in many states. Price reasonable. Address **C. S. Eppley,** Zanesville, Pa.

BIG TYPE POLANDS—High-class, registered. Hogs and pigs for sale. Write for my Special November prices. **J. S. HALL,** Farmdale, Ohio.

REGISTERED SPOTTED POLAND-CHINA PIGS Price \$10.00 each. **Peach Bottom, Pa.**

C. H. SWEIGART, Peach Bottom, Pa.

Reg. Spotted Poland-Chinas Fall pigs ready for sale. Write for my Special November prices. **A. M. Kennel,** R. 2, Honey Brook, Pa.

O. I. C. C's Choice Sows Pigs \$10 each. Pedigree furnished. Pairs and Trios not taken. Satisfaction guaranteed. **C. B. Bell,** Millersburg, Pa.

O. I. C. BOAR ready for service. \$25.00. \$10.00 each at 1½ yrs. old. Pedigree furnished. **Hollis Calvin,** R. 2, Beaver Falls, Pa.

DUROCS Big Type Reg. Durocs. Priced right. Shipped on approval. Visit our place. Write your wants. **O. C. Saunders,** Hummelstown, Pa.

CATTLE

BUCK & DOE RUN VALLEY FARMS Hereford Cattle, Poland-China Hogs. **THE SAINT ANTHON COMPANY,** Mortonville, Pa.

REGISTERED HEREFORDS. A select herd of the best Woodford Breeding. Cows, heifers and calves for sale at reasonable prices. Large herd selected from. **Fred J. Brown,** Dublin, Pa.

D. S. POLLED HEREFORDS—A fine selection of best blood. Come see our little herd. **CHAS. D. GILL,** Millersport, Pa.

REGISTERED MILKING SHORTHORN BULL CALVES. 3 months to one year old. Good ones at farmers' prices. Inquire. **Surgeon & McIlwain,** R. 5, Kittanning, Pa.

Angus Cattle at reasonable prices. Write **BAYARD BROS.,** Wayneburg, Pa.

GOATS

GOATS: Thoroughbreds, from world's heavy milkers. Calif. giant Nubians. **W. H. Kennedy,** R. 2, 3100, Goldsboro, Pa.



"Time and Labor Savings Paid for Ney"

NEY DAIRY BARN EQUIPMENT pays big dividends in labor and time savings plus increasing milk production. That is the experience of Howard Adams, R.D. No. 8, Moravia, New York with his regals, stanchions and water bowls.

You'll find Mr. Adams' story, together with stories and pictures from eleven other progressive farmers in a booklet called **Cow Comfort.** Your copy is ready. Just mail the coupon. Know the importance to you of the best in dairy barn equipment. Learn how quickly the first year is returned through more and better milk; through time and labor savings.

The complete Ney Catalog will be included if you mail the coupon.

THE NEY MANUFACTURING CO. Canton, Ohio Established 1871.

THE NEY MFG. Co., Canton, Ohio Please send me, without charge, a copy of "Cow Comfort" booklet. () check here if you want catalog No. 150.

NEW Send to Rural Route, City and State.

NO WORMS HERE! One of a herd of fine Berkshires wormed with Nema Capsules, owned by H. L. Knust, Clifton, Texas.

SEND FOR FREE SERIES OF 2 ILLUSTRATED WORM BULLETINS

Special Offer! With practical information to help you recognize worms from their droppings.

NEMA WORM CAPSULES (TETRACHLORETHYLENE O. T.) Kill Large Roundworms, Hookworms, Stomach Worms & Hogs, Sheep and Poultry

"No set-back" treatment safe, sure, easy to give—Already Nema has won praise from thousands of Livestock Raisers.

NEMA CAPSULES FOR Chickens and Turkeys Nema Capsules remove both tapeworms and large roundworms in one treatment without set-back. One of the bulletins tells about C-A Capsules.

Big Stores Sell Parke-Davis Products For free bulletins address **Parke-Davis Co., Dept. N-18-L, Ann Arbor, Michigan** **WALKVILLE, ONTARIO**

Price - \$110 F. O. B. Lancaster

NEW Peerless Combination Mill Grinds Anything Raised on Farm That is Fed to Livestock. Write for catalogue.

ASK RAILROAD AGENT ABOUT REDUCED FARES A Season of Education, Pleasure - - and a Trip to Chicago

Time to Play Safe "Before you ship, investigate." That is a good motto for those who start shipping farm products to new commission merchants in the big cities during the fall and holiday season. Each year the marketing officials of New York issue a list of the commission merchants who are bonded and licensed to do business in that state. Dealers in all important Empire State cities are given, with the commodities handled by each. A receiver is listed for almost every farm product from calves to carrots, rabbits to rutabagas, poultry to potatoes. Valuable suggestions to inexperienced shippers are included.

A supply of these valuable bulletins is being held for Pennsylvania Farmer readers. A postal card or letter asking for the "List of Bonded and Licensed Commission Merchants" will secure a copy for you. Mail your request to Market Editor, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

BE SURE TO SAY "I saw your advertisement in Pennsylvania Farmer" when writing advertisers.

Apple and Potato Show

SIXTY-SIX counties in four states were represented by over 500 exhibits at the third Tri-State Apple and Potato Show, sponsored by the Pittsburgh Chamber of Commerce and held in Pittsburgh last week. In spite of the dry weather the quality of exhibits was all that could be desired.

The Pennsylvania Farmer trophy for best county exhibit of potatoes was won by Somerset county. Fayette county was second and Venango county was third. The Junior Potato Judging Contest results were as follows:

First—Slippery Rock High School, Slippery Rock, Pennsylvania.
Second—Rockland High School, Rockland, Pa.
Third—Slippery Rock High School, Slippery Rock, Pa.

The individual boy making the best score was Robert Lewis of Rockland School who was a member of the team winning second place in the contest.

The winner of the Apple Variety Contest was M. E. Johnston of Conquenessing, Butler county, Pa., who named 18 of the 23 varieties correctly. F. W. Walker of Conquenessing, Butler county, Pa.; Mrs. Irene A. Seager of Fair Oaks, Pa.; and S. Z. Klopfenstein of Ravenna, Ohio, were tied for second, third and fourth places each naming 17 varieties correctly.

The trophy won by Somerset county will be officially presented by a representative of the Pennsylvania Farmer at the annual meeting of the Somerset County Extension Association at Somerset on Tuesday, November 18th. A representative of the Agriculture Committee of the Pittsburgh Chamber of Commerce will present the ribbons won by Somerset county exhibitors at the same time. There was a total of 510 entries made by 180 individual exhibitors. First place winners in the various classes follow:

Apples

Class 1.—Grimes—E. N. Shenot, Wexford, Pa. Jonathan—W. J. Weidley, Smithfield, Ohio. Delicious—Frank H. Turner, Franklin, Pa. McIntosh—Turner, Stayman—Weidley. Winter Banana—Tresedale Farms, Mars, Pa. Baldwin—Shenot, Rome Beauty—Weidley. Northern Spy—V. Lesh, Franklin, Pa. York—Inwood Fruit Growers, Inwood, W. Va.

Class 2.—Grimes—W. H. Mathews, Salem, Ohio. Jonathan—John E. Dornbusch, Barnesville, Ohio. Delicious—Dornbusch, Stayman—Weidley. Winter Banana—Tresedale Farms, Mars, Pa. Baldwin—Ralph Papania, New Waterford, Ohio. Rome Beauty—Weidley. Northern Spy—Lesh, York—Frank Turner, Franklin, Pa.

Class 3.—Grimes—John E. Dornbusch, Barnesville, Ohio. Jonathan—Dornbusch, Delicious—George H. McGinness, Enon Valley, Pa. McIntosh—Lesh, Stayman—Lesh. Winter Banana—Tresedale Farms, Baldwin—John Pherson, Volant, Pa. Rome Beauty—John S. Miller, Glenshaw, Pa. Northern Spy—Turner, York—Roscoe F. Mohler, Kent, Ohio.

Unlisted Varieties

Class 1A.—Gallia Beauty—Weidley.
Class 2A.—Gallia Beauty—Weidley.
Class 3A.—Arkansas—Roscoe F. Mohler, Kent, Ohio.

Potatoes

Class 1.—Russet Rural—1, Norman Doerr, Kiestert, Pa.; 2, E. M. Hay, Meyersdale, Pa.; 3, E. E. Dicker, Edinboro, Pa.; 4, John Fink, Markleysburg, Pa.; 5, C. P. Shenot, Wexford, Pa.

Class 2.—White Rural—1, G. H. Dumm, Ebensburg, Pa.; 2, E. M. Hay; 3, W. R. & L. E. Leaphart, Markleysburg, Pa.; 4, S. L. Saylor, Meyersdale, Pa.; 5, Frank Stoner, Markleysburg, Pa.

Class 3.—Irish Cobbler—1, Carl Starkey, Ravenswood, W. Va.; 2, Clyde Mason, Pullman, W. Va.; 3, Denby Sheets, Auburn, W. Va.; 4, John Peden, Ravenswood, W. Va.; 5, Mrs. C. M. Schwab, Loretto, Pa.

It Rained; but they Had their Party anyway

A Bell System Advertisement

A FARMER'S wife living near Adairsville, Kentucky, telephoned the friends of her twelve-year-old girl and invited them to a birthday party which she was giving for her. But when the day of the party arrived, it was raining heavily. A number of the guests telephoned to inquire if the party was postponed. The mother of the young hostess then called all of the other guests and told them that everything was prepared for their arrival. Thus reassured, the children all turned out, in spite of the rain, and every one enjoyed a happy afternoon.

The telephone is invaluable in keeping up friendly contacts and adding to the pleasures of life in the country. It is a profitable aid in selling livestock, grain, fruit and vegetables, either through local markets or co-operative marketing associations. And it is also a convenient means for ordering farm and household supplies when they are needed quickly.

The modern farm home has a telephone

Bargain Offer!

On the World's Greatest Glass Substitute

GENUINE

FLEX-O-GLASS
Weather-Tight. Rust-Resistant. Wind-Dust-Proof. Unbreakable.
1/10 THE COST OF GLASS AND BETTER
GUARANTEED TO INCREASE YOUR EGG PRODUCTION
10, 20, and 30-Yard Cuttings—1 Yard Wide

On POULTRY HOUSES

Brings Eggs All Winter
Lets in Ultra-Violet Rays

Prevents Disease—Promotes Growth—Brings Winter Eggs. Nothing better for laying hens: doubles and triples egg production. Prevents weak legs and disease. Mature chicks are easier. Your money back if it doesn't.
MORE EGGS Under FLEX-O-GLASS
"I got 525 eggs in Jan., 758 in Feb., and 641 in March from 55 chickens under Flex-O-Glass. Neighbors have a scratch pen covered with burials and got only 1 or 2 eggs a day."—C. Schaefer, Smithtown, Ill.

Less Than 4% Loss Out of 2,500 Chicks



Flex-O-Glass is valuable in helping our chicks grow rapidly, and one batch of 2,500 chicks at three weeks showed deaths of less than 4 per cent. We have never heard a complaint against it. —Standard Poultry Journal, Pleasant Hill, Mo.

MAKE YOUR PORCH A HEALTH ROOM

Save Fuel and Doctor Bills
You'll be surprised what wonderful comfort you will get by simply hailing Flex-O-Glass over screens. Flex-O-Glass holds in heat and keeps cold better than plain glass. Besides it admits the highest percentage of sun's healthful Ultra-Violet Rays.

Wonderful Porch Enclosure
"I ordered 30 yards of Flex-O-Glass several months ago for my back porch and believe me it is the warmest room in the house. The kids are tickled to death over it."—M. B. Abber, Webb, Minn.

Transforms Screen Doors into Light Storm Doors
We are delighted to hear that you are using Flex-O-Glass for screen doors. It has turned them into light storm doors. "It is all you claim it to be."—Mrs. Geo. Coleman, Rochester, N. Y.

Used in Hospitals
"I know how Flex-O-Glass has been in the Hospital and was taken to sit in the heating glow, and found it so nice."—Mrs. G. Kells, Aberdeen, S. D.

TEN REASONS WHY YOU SHOULD USE GENUINE FLEX-O-GLASS

- 1 One-tenth the cost of window glass and better. Patented.
- 2 Weather-proof; rust-proof; won't break.
- 3 Lets in more healthful Ultra-Violet Rays and more actual sunlight than plain glass.
- 4 Holds heat in and cold out better than glass. Lasts for years.
- 5 Easy to use—cut with shears and nail on.
- 6 Endorsed by leading agricultural experiment stations after thorough tests.
- 7 Scatters bright, healthful light all over room. Destroys bacteria.
- 8 Saves feed and cod-liver oil by producing "Sunshine Vitamin" D.
- 9 Matures chicks one-third sooner—triples egg production.
- 10 Saves fuel and doctor bills when used on porches and storm doors.

Whole Farm Flex-O-Glassed

"We use Flex-O-Glass on windows in barn, calf stable and poultry houses and we like it. I am sending for 10 yards more."—C. Richards, Chatham, Ind.

Better than Glass

"I have used Flex-O-Glass for 2 years and find it the best glass substitute I can buy. I find it gives better light than glass."—E. E. Negro, Madison, Ky.

Repair Broken Windows

Don't spend money for expensive glass that breaks so easily. Replace the broken panes with Flex-O-Glass. You can do it in a few minutes and have unbreakable windows at 1/10 the cost of glass.

Fine For HOTBEDS

Flex-O-Glass grows stronger plants quickly, which grow when transplanted.
"I use Flex-O-Glass and find I not only have better plants but far stronger than any other parterre here."—B. Benson, Ft. Worth, Texas.

Tested and Recommended by the WORLD'S FOREMOST AUTHORITIES

The Iowa State Experiment Station Test
They found that chicks under Flex-O-Glass did not develop leg weakness and that this glass substitute kept heat in and cold out better than window glass.

The Manitoba, Can., Experiment Station Test
They found that chicks under Flex-O-Glass gained a half pound each more than chicks under ordinary glass in a 12-week test. 16 chicks died under glass out of 50 started, only 3 died under Flex-O-Glass.

The American Medical Association Test
They found that months of severe weathering did not affect Flex-O-Glass in the least in its ability to transmit Ultra-Violet Rays. The Kansas, Ohio and Wisconsin Stations have also secured superior results with this "world's greatest glass substitute."

Dr. Morse
Consulting Chemist of Connecticut for 45 years, wrote: "Congratulations are due you. Flex-O-Glass makes hens lay because the Ultra-Violet Rays which penetrate it make hens healthy, chemically active and increase the oxygenating power of the blood."

The British Huminating Society
divided a flock of hens for 16 weeks and fed both groups the same. The group that received Ultra-Violet Rays laid 497 eggs. The other group laid only 324 eggs. This proved the Ultra-Violet Rays alone, which Flex-O-Glass admits from the sun, brought 373 eggs. "Go moves in a mysterious way, His wonders to perform."

TRY FLEX-O-GLASS 30 DAYS—AT OUR RISK

The fairest way we have to prove Genuine Flex-O-Glass quality and benefits to you is to let your order on a 30-Day Money-Back Test. You take no risk—use it 30 days, if not surprised with results and absolutely satisfied, return it and get your money back. That's fair, isn't it?

Our Supply of 10, 20 & 30 Yard Cuttings is Limited. Order Your Supply NOW—DIRECT FROM THE AD.

Order your supply now at 29¢ a yard. Test Flex-O-Glass 30 days at our risk. From all our claims. Order 20 yards or more right now before you forget—before the rolls are gone, and get the free pencil sharpener. Perhaps your neighbor can use 10 yards also. We pay postage on 10 yards or more.

DON'T DELAY Get your order in now. Flex-O-Glass is the greatest thing ever offered—at only 29¢ a square yard. Whether you order 10, 20, 30 yards or more, we will protect you by our Iron-Clad, Money-Back Guarantee. Send a check or money order today. Give it a 30-Day Trial! Now! We People Postage. Less than 10 yards—5¢ per yard. All orders filled day received—FREE! Look up section of Poultry Diseases, and find Flex-O-Glass valued at \$1.00, sent with 20 yards.

MAIL THE COUPON—NOW! The Remittance enclosed you are Guaranteed New, Clean Stock, same as all genuine Flex-O-Glass, formerly sold at 50¢ a yard.

FREE WITH 20 Yds. COLORED PLATED AUTOMATIC PENCIL (Value 1/2¢)
GUARANTEE COUPON!
FLEX-O-GLASS MFG. CO., Dept. 602, 1451 N. Cicero Ave., Chicago, Ill.
Find enclosed \$..... for which I have ordered..... square yards of Flex-O-Glass (29¢ per yard). If I am not absolutely satisfied with the Flex-O-Glass 30 days I may return it and get my money without question.
Name..... (PLEASE PRINT)
Town.....
St. or R.F.D.

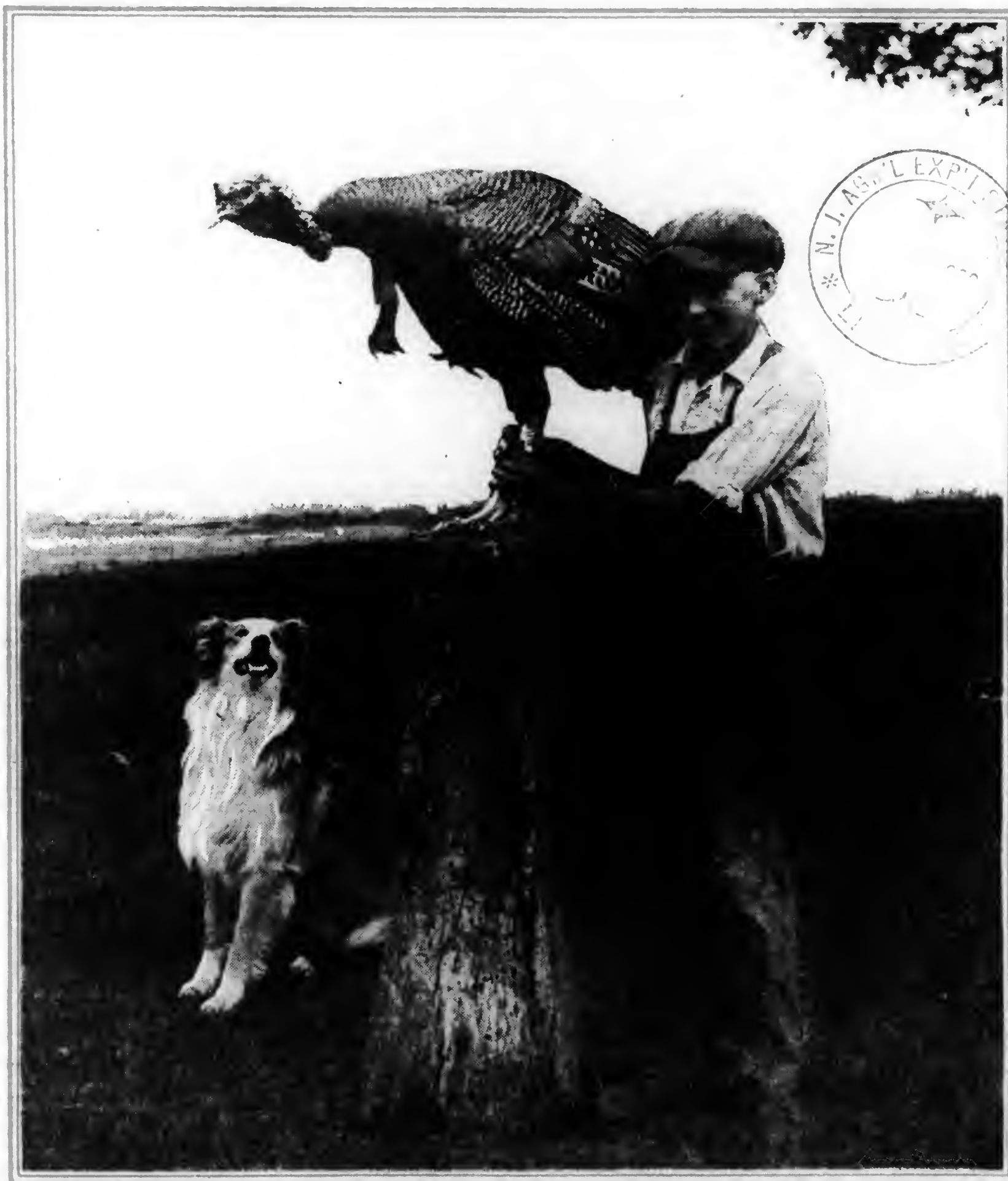
PENNSYLVANIA FARMER

Published Weekly

Established 1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

November 22, 1930



Philadelphia

Pittsburgh

Harrisburg

LET'S IN MORE ULTRA-VIOLET RAYS

—the life-giving rays of the sun—than any other glass substitute (30% more as proved at the Iowa State Experiment Station). And this superior quality is PERMANENT; the American Medical Association found that the severest weathering for months did not affect Flex-O-Glass.



EASY TO INSTALL

All you need is scissors to cut the Flex-O-Glass and a hammer, nails and a few wood slats. No frames to buy or make. No skill required. And you have a lasting protection against wind, rain, sleet and all kinds of weather.

Unaffected By Water

Put a sample of Flex-O-Glass in water and lay it aside until dry. You will find that it will not turn white and will not take up water. It does not stop the light and will not rot or rust.

Withstands Snow and Sleet

While Flex-O-Glass is thin enough to gather in more than enough Ultra-Violet Rays, yet it has double strength and warmth.

A. A. Shuster of Macon, Ill., says: "Although we have had 20 below, and snow has piled over 4 feet on the Flex-O-Glass, and over an inch of Flex-O-Glass, and over an inch of snow, the glass is still O.K. and my egg production shows an increase of 41% per cent, over last year's. (Guns here laid 25 eggs in January.)"

Many People Can't Believe the Amazing Results Obtained by Using FLEX-O-GLASS Until They Have Tried It

IT WORKED WONDERS—"I am more than satisfied. Your glass does all that and then some. I have a new coop and it is stone proof. I took it—take it—it will remain unbroken."—Hoffman Farms, Indianapolis, Ind.

500,000 Satisfied Customers Can't Be Wrong

FLEX-O-GLASS MFG. CO.

1451 N. Cicero Ave. Dept. 602 Chicago, Ill.

There is Only One GENUINE

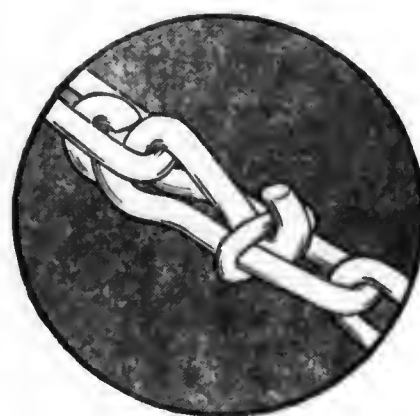




Always an "Open Road" from FARM to MARKET

And a safe road for pleasure or business trips to town when your cars and trucks are traveling on the New Silvery McKAY TIRE CHAINS. For months and miles these better chains carry you over the toughest roads, through the deepest ruts and snow drifts. Their cross chains are specially hardened to give you extra mileage. And the new, silvery rust-resisting McKay finish adds to the beauty of your car — matches the other bright fittings.

you'll never lose **TIRE CHAINS**
with the **McKAY FASTENER**



— for the McKay Fastener is the best fastener on the market. 1— Holds with a never-let-go grip. 2— It's the easiest fastener to open and close. 3— Its operation is not affected by snow, ice, mud or rust. 4— No tools of any kind necessary in opening and closing.

When you need tire chains, ask for McKays.

UNITED STATES CHAIN & FORGING CO.
Union Trust Building, Pittsburgh, Pa.

The New Silvery Rust-Resisting

McKAY TIRE CHAINS

Now you can
get
McKAY
Steel or Rubber
Tire Chains

Farm Facts and Fancies

By ALVA AGEE

HE was a man I happened to know. He was talking, stating the causes of the present depression and assigning the responsibility. I have never known a man who had greater facility in getting a job and losing it than the speaker, but the fact does not detract an iota from what may be the correctness of his views. It appears to him that the hard times and lack of employment are due to the devilish plans of the very rich who are forcing the prices of industrial and railway shares down so that they can buy them cheap. Unemployment of labor fits into their scheme. It appears that they are keeping times dull so that they can buy from the less fortunate, and ordinary folks must suffer hard times while this maneuver is being carried out.

As to the Facts

If one is interested in watching the financial statements of the great investment trusts and like institutions he knows that this is one period of depressed times when the rich are loaded down with their investments in our industrial enterprises. The belief last spring was that business was beginning to grow better and the big investors added largely to what they had. The great banks, insurance companies, wealthy individual investors and others who control a lot of money are interested that the industries make more and more money, and just now they have an immense stake in a return of good times.

It is worth calling attention to such a fact because only harm results from any suspicion that one is kept out of work by the machinations of the wealthy. Their money, by the billions, is locked up in industrial and transportation enterprises, and they are waiting for a return of confidence just as is the fellow who is without work. It is a good time not to imagine a cause for grievance that does not exist. We are on the way to recovery from the spending of money before it was earned. It does not help things to stir up hatred, and for once, at least, there is no such cause as the man assigned. Everybody needs good times.

White Grubs in Lawns

Study of methods of control of the Japanese beetle, made by the laboratory in New Jersey, has rendered a service to those who have lawns infested by the common white grub. Circular No. 163 of the State Department of Agriculture, Trenton, New Jersey, issued last year, gave the method used, and any reader of this paper who is interested may still be able to secure a copy. The treatment consists of the use of lead arsenate to poison the grubs. An application of five pounds of the arsenate to one thousand square feet of turf is sufficient to control grub injury for three or four years. This quantity of the poison should be mixed with a bushel of moist screened sand or soil and can be scattered over the surface by hand. During the mixing care must be used not to inhale the dry poison.

The material washes down into the surface soil where the grubs feed. The cost is slight enough to permit use on lawns. No injury is done to common grasses except where heavily shaded. Readers of the circular are warned not to use the arsenate in vegetable and flower gardens. We now have a dependable means of controlling the various species of white grubs in lawns where often they are a big nuisance. Probably an application should now be deferred until spring.

A Sectional Report

Charge of the publicity for the Association of Homely Farm Owners is miles away from a duty I may owe to that large group known as "The Thriftless." I am interested in the

aims and ways of the former, and learn that occasional reference to them is appreciated by a few. Concerning the comment occasionally made upon the thriftless there is no word of approval, and the two groups would not be mentioned in the same paragraph except to emphasize their utter dissimilarity in every way. In the face of some disapproval I should like to make a report on the way the members are meeting the present business depression.

We are being told much about the condition of the manufacturers, the railway people, the farmers and others in this crisis that has taken on major proportions, I fear, but there is a considerable section of the public that gets no attention. The late census apparently left little undone in its effort to get a report of all economic and social facts, but it neglected to enumerate the thriftless as such and we do not know their number, but it is not small and cannot be ignored.

Facing Depression

It is no small thing not to have income seriously cut during hard times. The members of this unorganized group look about them and see the mass of hustling folks cutting down on expenses, and that means the hardship of reducing the level of living either through necessity or fear. Things to which we have accustomed ourselves seem to be necessities, and cutting down is a hardship.

So far as my information and inference go, our thriftless folks have escaped the major part of such distress. They never have wanted anything badly enough to work hard for it, and with their philosophy of life they now carry on while others stumble. Their mental attitude is depression-proof. They may hear of unemployment conferences, but only wonder why people want to be employed. The reason for the slogan, "Buy Now," is beyond them, just as is the buying.

Happiness is a common aim of life and it is safe to report for "The Thriftless" that its members are passing through this business cycle about as happy as ever. They have the satisfactions of life to which they have accustomed themselves, and in this respect they believe they have the advantage over more ambitious folks. Being without any spokesman, they are entitled to this report in this day of general inquiry into the nation's welfare.

After Election—What?

TOO often we feel that after the magic bit of paper that is our ballot is dropped in the ballot-box our part is done. This is not true.

A candidate's election does not prove that all the things for which he claimed to stand are approved by his constituents. If, in the campaign, several issues were at stake he doubtless received many votes because of his stand on some one question.

We often hear this statement, "I don't like his views about this law or proposal, but I voted for him because he is honest, or because I like his ideas about another matter." Perhaps a newly-elected officer, like a new cook in a family—knowing how to cook well but wondering about the requirements and tastes of the strangers who have hired him. The family should make known what it expects in exchange for wages.

After his election if our representative is to represent, not misrepresent, us he should be informed as to the will of the people "back home." This information should be plainly stated in a few words, and a letter of appreciation is not wasted.

Enemies of good government are alert in these matters; friends of good government and law-enforcement should be no less active. M. C. Smith, Potter county, Pa.

FOR MORE THAN THIRTY YEARS THIS RED BALL

HAS BEEN YOUR ASSURANCE OF "MORE DAYS WEAR"



250 PRIZES

for
"WAY-BACK" MEMORIES

Here's your chance to win two pairs of Ball-Band rubber footwear—your own selection. 200 pairs will be given for the best letters of early experiences with Ball-Band. 50 additional pairs will be given for the best photographs taken on the farm twenty or more years ago. Search your memory—and the family album—for a prize-winning letter and picture. This offer expires March 31, 1931. Tear off the Red Ball trade-mark below and send with your letter.



Were YOU one of the first of our ten million friends?

LOOK far back in your memories—twenty years, thirty years, perhaps even more. Can you remember your first pair of boots with the little Red Ball trade-mark—your first trial of *more days wear and built-to-the-foot comfort* in rubber footwear!

More than thirty years have passed since the first Ball-Band rubber footwear was made. Today ten million of you buy Ball-Band from over 70,000 dealers in this country. Have you been one of our friends since the early days? Then let us hear from you!

Write us a prize-winning letter about your

first meeting with Ball-Band. Tell us when you first saw the Red Ball trade-mark on footwear. To refresh your memories—and maybe win an extra prize—look through the family album for snapshots of those days of twenty or more years ago. All pictures—including the prize winners—will be returned if requested.

Year after year our skilled craftsmen have met your footwear needs with better quality at always reasonable prices. Today, the Red Ball trade-mark brings you that *natural, light-on-the-foot* feeling you want in modern footwear.

Yet the live, tough rubber in Ball-Band footwear will wear longer than it's reasonable to expect.

We prepare rubber for but one purpose—the making of quality footwear. And we've developed many special compounds—for the heel, for the toe, for the sole, and so on. The stout linings and fabrics you see in Ball-Band are knit in our own factory. Each part, rubber or fabric, is perfected for the particular job it must do; each adds to that *plus wear* you have learned to expect of Ball-Band.

Your entire family's needs are cared for by our full line of over 800 items, including Mishkole leather work shoes. There's a Ball-Band dealer near you. If you do not know his name, write us. And remember to look for the Red Ball trade-mark.

MISHAWAKA RUBBER & WOOLEN MFG. CO.
464 Water St., Mishawaka, Ind.

Look for the Red Ball

BALL BAND

Built-to-the-foot

BOOTS • RUBBERS • ARCTICS • GALOSHES • CANVAS SPORT SHOES
LEATHER WORK SHOES • WOOL FOOTWEAR AND SOCKS



New-Day Styles— Old-Time Quality

Choose the boots that fit your needs—short boots, hip boots, red boots, white boots, sport boots. At the extreme left is the 3-Buckle Walton giving "boot protection with shoe comfort." Growing fast in public favor.

Get a pair of these 4-Buckle all-rubber Arctics—and forget the weather. Reinforced at every point with live, tough rubber, these Arctics will give you the long wear you have a right to expect of Ball-Band.

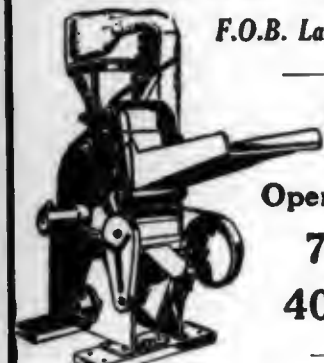
This 2-Buckle Sanstep is especially popular—cannot pull off in the mud. (Also made without buckles.)



DELLINGER MILLS

Hammer Type
Priced as Low as \$110.00

F.O.B. Lancaster, Pa.



In Sizes
to
Operate with
7½ to
40 H. P.

Furnished with or without
Automatic Feed Rolls and
Governor.

Write for catalogue.

A. M. DELLINGER, Lancaster, Pa.



Calls
On
The
Antarctic

The
Old Reliable

Reg. U. S. Pat. Off.

Brown's Beach Jacket

Worn by Byrd's men when they fought
the cold and ice. Just the cold pre-
vention for the outdoor man. Made
with the same care and of the same
high-quality material which first gave
it its reputation many years ago. It
has an almost windproof exterior with
knit-in wool flannel lining. Three styles
—coat with or without collar and vest.

Ask your dealer

BROWN'S BEACH JACKET COMPANY
Worcester, Massachusetts

When horse goes lame . . . Reach for ABSORBINE

38-year-old Absorbine relieves lame legs
strained or injured. Old-timers rely on it to
get soreness from overworked muscles and
tendons. No lost hair, blisters, or lay-ups.
Kills infection; aids prompt healing of
cuts, bruises. Get a bottle and keep it
handy. All druggists—\$2.50. W. F. Young,
Inc., 354 Lyman St., Springfield, Mass.

Enjoy a Radio at Low Cost.

You can buy a used single dial 6, 7, or 8 tube set of late
model with all known improvements, elaborately designed and
built, such as **ATWATER KENT, RADIOA, etc.**, which originally cost from \$100 to \$200 . . . for **\$15**
You can buy a used 5 tube set of outstanding range and val-
ues, such as **FRESHMAN MASTERPIECE, CROS-**
LEY, etc., which originally cost from \$50 to \$100 for **\$7.50**

All sets for storage battery or dry-cell operation
Every set thoroughly tested and tried.
Sold under a money back guarantee.

Write for further information.

E. F. BEACH, P. O. Box 5068, E. Liberty St.,
PITTSBURGH, PA.

500 MEN WANTED

To sell high grade
nursery stock. Part
time. No experience
necessary. Substantially paid. Free. Old reliable company.
THE HOME NURSERY, Box 109, GENEVA, OHIO

**EXPLODING
WEDGE**
Big Money for Agents.
Consistent to sell all kinds of timber.
Payed Post prepaid in any state in U. S.
\$5.00. Send money order or check to
BUTCHERMAN MFG CO
7754 SHELTON ST
PITTSBURGH PA



By R. P. KESTER

I HAVE just been listening to a
radio program, put on by leaders
and members of the Four-H Club,
as a part of the National Farm and
Home Hour. This hour is one of the
most entertaining programs broad-
casted. I hope farm people have the
habit of tuning in on this program
regularly.

As I listened to the short talks
given by the boys and girls concern-
ing their activities and interests, and
noted the evident interest in farm and
home management, I could but silent-
ly compliment the young people on
the farms today on the advantages
they have which we, of my genera-
tion, did not have. The public schools
of the better kind, the work of the
U. S. government, and the agricul-
tural colleges, are giving the young
people a start in life which even the
oldest farmers of a generation ago
did not and could not have.

When I came to young-manhood I
had no interest in the farm nor in
anything rural. As I look back on
my own experience I do not think I
was to blame for this attitude of
mind. Nowhere in my education up
to that time was there anything to
create knowledge or enthusiasm con-
cerning farming. What little educa-
tion or schooling I had was wholly of
a kind to direct my mind in other
channels. Of course, I went to such
agricultural meetings as we had—
farmers' clubs, granges and farmers'
institutes—but these were mostly by
and for the older people.

There are many who disparage the
present movement to educate boys
and girls as farmers, saying that it is
all tending to further over-production.
But that is a narrow view. There will
be and must be farmers and farmers'
wives in the future and if these fu-
ture men and women can start their
careers better fitted to make a suc-
cess of them there will be better
farms, better homes and better men
and women.

The boys and girls of the Four-H
Clubs are receiving the kind of infor-
mation which will enable them to
avoid the mistakes and failures their
parents made. They need not experi-
ment during tiresome and fruitless
years to find out how to feed stock
and poultry, how to fertilize the soil
and how to combat disease and pests,
as did their fathers. The girls are
learning how to build and conduct
homes that will minister to the well-
being of their families. And together
they are learning how to find pleasure
as well as happiness in farm life. And
above all, they are learning how to
cooperate, and this is the great les-
son which we, of older generations,
did not learn.

I was talking to an intelligent man
the other day who had just lost his
job. For several years he has been
employed by a corporation at a good
salary. But the slump made it neces-
sary to reduce the force. Here is what
he told me: "Our expenses for rent,
food, heat and clothing will go right
on. We have no supply of food or
fuel to tide over the lean spell of un-
known duration. So far, I have not
been able to find a job of any kind.
What we will do I do not know. I am
completely discouraged and scared."

He is but one of unknown thou-
sands in similar straits just now.
What the outcome will be is hard to
tell. Here again, I reverted to condi-
tions as they were when I was a boy.
In the first part of this article I was
complimenting the present generation
on the great improvements we have
had during the past quarter of a cen-
tury. But the last reference brings
up the fact that we have not improv-

ed on the old practices in all the ac-
tivities of life. For instance:

In the older days it was a necessary
concern of home-makers, husbands
and wives alike, to fill their shelves,
bins, garrets and woodsheds with
enough food and fuel to last all win-
ter. The wives canned and dried fruit
and vegetables galore, and it was the
pride of a good housewife's heart to
show these to visitors, and to realize
that, come what would, they had a

plentiful supply of food in store.

Only the improvident husband fail-
ed to cut and rank wood and kind-
ling, and lay in a supply of coal
against the winter's need. This was
considered as much a part of the
yearly work as storing the harvest.
Even the people who lived in towns
bought several bushels of potatoes
and apples, and bought and salted
down their winter's meat.

Of course the modern custom to
buy from day to day what is neces-
sary to live comfortably and eat
sumptuously is good as long as the
income is uninterrupted. Bread, meat,
vegetables and fruit, of course, are
better direct from the factory or cold
storage plant. But when the money
stops coming in and there is no sup-
ply laid away, things look gloomy,
indeed. It is this change in the habits
of living that I do not think is for
the better.

Too Anxious to Sell

A DISTRESSED elderly farmer
wanted some advice about buy-
ing back his old farm. Some years
ago he sold it, taking a second mort-
gage. The five thousand of the first
mortgage borrowed from a local
agent he had invested in town prop-
erty to live in, expecting the interest
of the second mortgage of four thou-
sand dollars to take care of the needs
of himself and his wife helped out by
a little other money he had and the
odd chores he did in summer for peo-
ple about town. Year after year he
saw his old farm going down until
finally with taxes unpaid and interest
lagging the first mortgage people
were compelled to take court ac-
tion.

A common enough story in every
country community. Now should the
old gentleman forget his second mort-
gage and buy back his old farm at
the price of the first mortgage plus
costs, interest, taxes and the certainty
that a large bill for repairs would
come on him before he could rent the
place?

He Let the Farm Go

Of course it was useless to remind
the worried man who sees old age
daily coming nearer that he was too
anxious to sell the farm in the first
place. The man who has but one or
two thousand dollars to pay down and
must borrow all the rest is not a safe
person to sell any farm worth ten to
twelve thousand dollars to at any
period of country history. The tempta-
tion to skim the cream from the
fertile acres and then hold on until
the last gasp is ever present.

In this particular case the owner
threw up his hands, as he put it, and
let the farm go. A relative bought
it in at the price of the mortgage
and other expenses connected with
the foreclosure. The man who had
bought it in the first place from the
elderly owner never moved off. He
simply cleared away the second mort-
gage and the interest by a clever
stroke, a dishonest scheme, and then
went to work on the repairs for him-
self.

Investigate First

In our section that trick has been
played more than once, but elderly
people fail to investigate before sell-
ing. The life in town away from hard
work and anxieties looks alluring,
and the first man who makes a propo-
sition to buy the place gets it. After
a few years he clears off the second
mortgage by the court route and re-
mains on a cheap farm. Going through
bankruptcy, letting the farm go for
taxes or for the first mortgage wipes
out the large second mortgage with
delinquent interest and eases the
farmer's burdens, according to the
way people scheme things out.

If elderly men and women would
only see to it that somebody in a po-
sition to know looks up the prospec-
tive buyer there would be fewer big
second mortgages placed on farms. It

sounds so plausible when the prospec-
tive buyer says that he will begin
paying the second mortgage at once
by installments, that the owner read-
ily sells and retires not to a life of
ease and lack of trouble, but to an-
xiety and distress as the years find him
getting less and less able to cope with
the world.

True, the old man received for his
farm four thousand dollars, that
much was not lost, but to the end of
his days he will mourn over his mis-
take. Once more beware of the pro-
spective buyer who wants to be ac-
commodated by allowing him to bor-
row a fair sum on the purchase let-
ting the owner hold a large, unwieldy
second encumbrance. It is and always
has been dangerous business.

Farm Loan Agent.

Friendly Talks

By
Edgar L.
Vincent

A LITTLE while ago I paid a
visit to the farm of a man
who was said to have some
very choice cows. Indeed, one of them
had made a fine record under test.

While I was there I went down into
the pasture where the herd was kept
during the day time, and such an ag-
gregation of bottled cows I never
saw before! Some of them had slits
in their ears that puzzled me. I know
folks used to distinguish their cattle
by particular ear marks, but these
did not seem to have any uniformity;
but I soon understood better about it.

There was a dog on the farm. When
it was time to round up the cows at
milking time that dog took after
them like a wild animal. The cows
stuck their tails up skyhigh—those
that had tails left, and started on
the dead run for the stable. Now
and then the dog would take a nip
out of the harassed animals.

Now my wonderment is that any
man will permit his cows to be pas-
tered that way. Surely, it took right
out of the value of the herd. I would
not give much for a bottled cow.
I have been whacked on the side of
my head by the stub of a tail like
that and I know it is no fun.

And I doubt if cows do as well after
experiencing the dread and the pain
of being nabbed and dogged in that
way. I know I would not be at my
best with such a fear hanging over
me.

And I know another thing. Every
time a man hurts his cows or other
farm creatures, or permits them to
be abused, something comes into his
life that ought not to be there. He is
not quite as good a man as he
was before. We do these things so
thoughtlessly, but that is no excuse
for us. Our constant prayer ought to
be, "Lord, help me to think, really
to think!"

President - - - Arthur Capper
Vice-President - - T. D. Harman
Vice-President - George M. Slocum
Editor-in-Chief - - E. S. Bayard
Manager - - - Neff Laing

PENNSYLVANIA FARMER

Published Weekly

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa.,
under the Act of March 3, 1879.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., November 22, 1930

21

The World's First Rotolactor Appears in Public

By G. W. HARRIS

FEW will believe the story of the newest in-
novation in dairying unless they have seen
it with their own eyes. This rotary milking unit
at the Walker-Gordon Laboratory Company's farm
at Plainsboro, New Jersey, is so far in advance of
any other idea which has been developed on the
dairy farm in recent years that it seems almost
unbelievable, and already comments have been
heard about this "folly," "one as great as Soviet
Russia's plan of collective farming." With the
rapid changes taking place in our present agricul-
ture and methods of farming, it is not wise to
write off new developments and inventions, even
though hope for their immediate success does not
come within our range of vision.

First, let us picture this newest invention. The
rotary milking unit, with a capacity of 240
cows per hour, cleans and milks 1,680 Walker-
Gordon cows three times a day. It is
not a new idea to bring the cows to
a central milking barn, but a contin-
uous operation of cleaning and milking
a large herd of cows as they
slowly ride along on a ring-like plat-
form is new. This "rotolactor" is the
first of its kind in the world. Stan-
chions on this platform accommodate
fifty cows which are cleaned and
milked with each revolution of the
table, the operation being continuous.

The Cows Like It

One afternoon I stood watching this
scene which seemed like a well-train-
ed animal act under the big top—one
never meant to amuse the fickle pub-
lic, but a carefully planned venture in
the economical production of high
quality milk. Cows were moving from
their barns into the milking room
through the alley entrance in orderly
single file.

"Watch that mouse-colored Jersey
with the wild look in her eyes," re-
marked a friend of mine, "and you
will see some fun when she reaches
that moving platform." He was dis-
appointed in his prediction, for the
wild-eyed lady quietly stepped into
her stall on the "rotolactor," and the

stanchions closed about her neck just before she
started through her shower bath.

The shower bath was supplemented by a more
vigorous cleaning by an attendant with hose and
water. The flanks and udder of the cow were
wiped by another white uniformed attendant, while
blasts of hot air quickly and completely dried her.
One-third of the ride was completed. A sample of
foremilk had been drawn to see that no unhealthy
condition of the milk had developed since the pre-
vious milking, the test-cups of the milker were at-
tached to the cow and she continued on her way
contentedly chewing her cud.

Each of the 1,680 cows went through the same
procedure as they entered the tiled milking room,
where an air conditioner maintains an optimum

temperature and humidity. Everything was order-
ly and running smoothly.

When you stand in the visitors' gallery looking
down on this bovine merry-go-round you hear no
coarse music from the callopie, only the rhythmic
hum of machinery and the soft swish of milk as
it finds its way from the cows to the glass con-
tainer fastened to the frame-work above them.

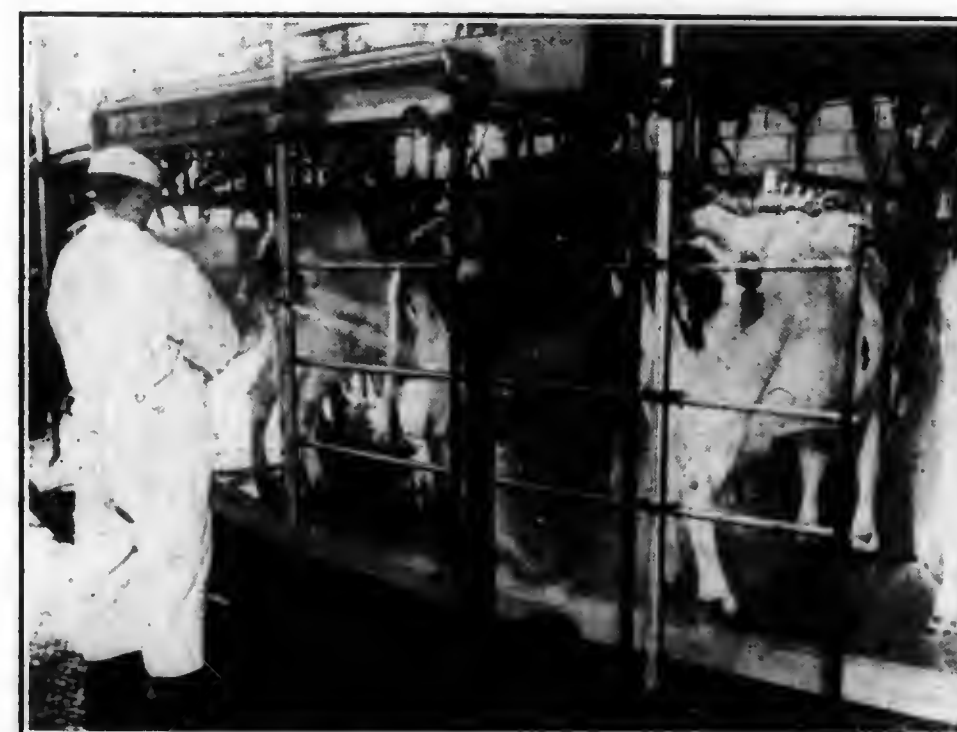
Here is a cow milked before the unit has com-
pleted its revolution! But she must wait until she
reaches the tunnel leading back to the barns. Soon
an opening in the wall before her appears, the
stanchions open automatically and she steps for-
ward to return to her barn.

The filled milk jar reaches the weighing ma-
chine, is emptied, weighed and recorded automati-
cally and pumped directly to the creamery with-
out being exposed to the air. The glass containers
may be seen in the picture at bottom
of this page.

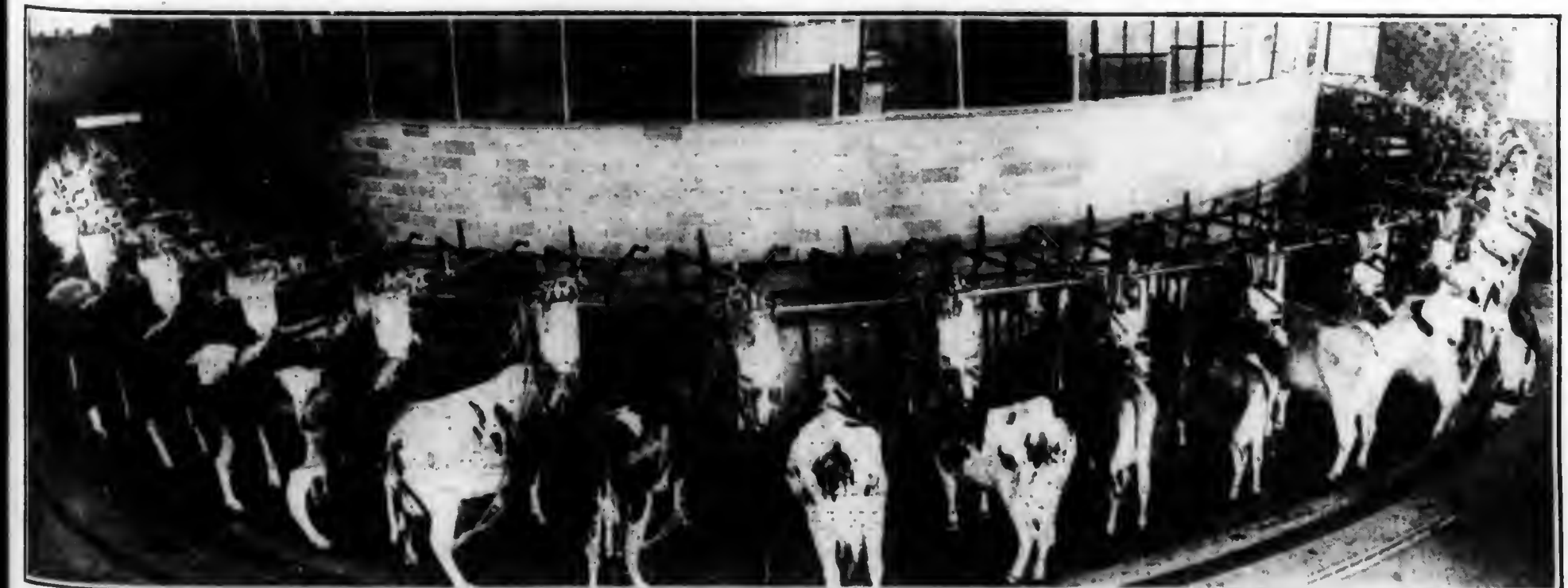
Another cow enters this stall to go
through the shower bath, and while
this cow is getting her bath the milking
unit is being cleaned and sterilized.
After a cow has been milked the
test-cups of the milking machine are
attached by means of a hook to an
extended arm on the end of which is
placed a roller. As the platform re-
volves, the roller engages with a
track and the test-cups are carried
into a trough of cool water and water
is sucked through the test-cups and
into the glass jar. When a jar is filled
the track carrying its test-cups
raises, the test-cups are lifted from
the water and the jar is immediately
emptied of its cool water. The track
descends again and this time the test-
cups are lowered into hot water. Here
the unit is thoroughly cleaned and
sterilized, the hot water later to be
released and the unit again is rinsed
in cool water.

A Striking Achievement

The "rotolactor" is no doubt one
of the most striking achievements
ever accomplished in the mechanizing
and industrializing of agriculture. It
is monument and tribute to the origi-
(Continued on page 19.)



The cows get three baths a day, one before each milking. Within half a minute after the cow takes her place on the milking platform she is showered with warm water, first with an automatic shower and then with a more vigorous shower from a hose in the hands of experienced attendants.



A panoramic view of the rotolactor, a rotating platform which automatically washes, dries and milks 50 cows at each revolution. Centralizing the milking operation is in line with the modern medical practice of moving the patient to a hospital operating room rather than trying to duplicate hospital conditions in the patient's home. The circular platform which is 60 feet in diameter, moves at the rate of 15 feet a minute, cleaning and milking 1,680 cows in seven hours. The entire process is completed in the 12½ minutes that it takes the rotary platform to make one complete revolution.

PENNSYLVANIA FARMER

Published Weekly
Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
T. D. HARMAN, Vice-Pres.
GEORGE M. SLOCUM, Vice-Pres.
KEEF LAING, Manager

EDITORIAL STAFF
E. S. BAYARD, Editor-in-Chief
C. L. WHITE, Editor
MILES HORST, Field Editor
M. C. GILPIN, Editor
G. W. HARRIS, Editor

Editorial Offices: PITTSBURGH, HARRISBURG, PHILADELPHIA

Contributing Editors: R. P. Koster, Alva Agee, L. W. Lighty, W. D. Zinn,
R. U. Blasingame, J. F. Shugart, F. L. Bentley, J. G. Lipman,
S. W. Fletcher, H. C. Knaedel, A. A. Bortland,
R. L. Scharring-Hausen, Gilbert S. Watts,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR.
Cash in advance. Single copies, 10 cents. Postage paid.
RATES OF ADVERTISING:
\$1.00 per square inch per week, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for long-term and classified advertising. No descriptive material or advertising inserted at any price.

Member Agricultural Publishers' Association,
Audit Bureau of Circulations.

Volume 133, No. 21 Established 1377

O give thanks unto the Lord; for he is good:
for his mercy endureth forever.

The pastures are clothed with flocks; the valleys
also are covered over with corn.

He causeth the grass to grow for the cattle and
the herb for the service of man; that he may bring
forth food out of the earth.

Thou crownest the year with thy goodness, and
thy paths drop fatness.

Thou openest thine hands, they are filled with
goodness.

Blessed is the man that considereth the power of
the Lord: he will deliver him in time of trouble.

ESCAPED

A BULL owned by William Gumbert of
Pine Hill, Somerset county, Pa., got
loose in its box-stall recently and proceeded
to attack its owner. After a combined chase
and tussle Mr. Gumbert was able to crawl
over the hayrack to safety. The doctor found
penal but not serious injuries and Mr. Gumbert's
friends are congratulating him on his escape.
For few emerge alive from an angry bull's stall.

WHEAT-FED WINNERS

AT the Kansas National Show at Wichita
last week a carload of wheat-fed hogs
won the championship. 24 carloads competing.
They were Poland-Chinas averaging 240
pounds and were "finished largely on a wheat
ration." Wheat-fed hogs are appearing on all
markets. They are not quite so fat or so
weighty as is usual when corn is abundant
but they are meaty and quite satisfactory to
slaughterers.

ROMANCES OF AGRICULTURE

THERE are plenty of romances in Amer-
ican agriculture aside from personal
ones, and some gifted author might bring
them together in a highly interesting volume.
We need mention only a few, such as White
Burley tobacco, the Concord grape, the
Grimes Golden apple, several varieties of
grain; or among animal—Hambledonian, Jus-
tin Morgan and other founders of races or
breeds. All these things have added to the
agricultural wealth of America and should
not be forgotten.

FOR DELIVERY

THE Grain Stabilization Corporation an-
nounced last week that it would require
delivery of wheat bought on December con-
tracts, said to be about 10,000,000 bushels.
That is the privilege of any buyer. It is hard
to see how the Corporation could do any-
thing else consistent with its ideas about sin-
ful speculation. For it does not call future
trading speculation if delivery is made. Of
course the fact of delivery of grain or the pay-
ment of equivalents has nothing to do with
the character of the transaction. One is just
as much a speculation as the other. If those
who are handling public funds had their own
money at risk probably they would under-
stand this better.

FARM BUREAU FEDERATION

THE American Farm Bureau Federation
holds its annual meeting this year at
Boston, Mass., in honor of the three-hun-
dredth anniversary of the founding of that
city and the commonwealth of Massachu-
setts. The meeting will be held December 8,
9 and 10. Preceding it, December 5 and 6,
will be held a National Farm Women's Con-
ference, under the direction of the Federa-
tion's Home and Community department.
We are willing to wager ten cents worth of
good cigars that the women make fewer
speeches and shorter ones than the men do,
and talk less nonsense besides. Reduced rail
rates have been secured for both assemblies.

THE GREATEST EXHIBIT

IT would be impossible even to mention all
the things which go to make the Interna-
tional Livestock Exposition what it is. The
great array of the continent's best meat and
draft animals, the carlots of prime fat stock,
the grains and forage plants from this and
other continents, the educational exhibits
and demonstrations, the thirty meetings of
stockmen, the evening entertainments and
the people from all over the country all go to
make an inspiring spectacle. But there is one
exhibit of greater importance than any of
these. It is the host of young people, boys
and girls who have earned their trip to the
International by excellence in club work. No-
body can see a thousand or more of these
youngsters without feeling that the future of
agriculture is going to be better than its past.
And this reminds us that the only way to get
a reduced fare in eastern territory is to ask
for a certificate to the Club Congress, held
November 28-December 5, and have that
certificate stamped at Club Headquarters at
the Exposition.

OUT OF THE DUST

LET us attempt once more to make clear
a few things about which considerable
dust is being kicked up. The Federal Farm
Board is not responsible for the Agricultural
Marketing Act or for any of the merits or de-
fects of that legislation. The Board is re-
sponsible for the administration of the Act
and nothing more. So that whatever the
Board's policies may be, and whatever the
effects of those policies, the Board is not to
be censured as long as said policies are in
accord with the provisions of the Act. For
the Board, if it does its sworn duty, must ad-
minister the Act as it is, not as it should be
or as various interests may want it to be.

Before the enactment of the Agricultural
Marketing Act we analyzed its stabilization
provisions as economically unsound, com-
mercially impossible and contrary to the wel-
fare of agriculture. Thus far experience has
shown the stabilization scheme to be all of
these things. Moreover, it is now assailed
on the ground that it is unconstitutional. If
it is why do not those who assail it bring the

point to an issue in the courts? Out of such
experiments some day will come up a few
compelling facts about the use of public funds
and public agencies in such vast and costly
speculations as we now see in wheat and
cotton. In the end we expect farmers to join
with other interests in demanding the repeal
of provisions under which such things are
possible.

It is unfortunate that the dust of prejudice,
of class interest, of sectional advantage and
even of partisan politics so much obscures
a problem of business and government's re-
lation to business. Let us try to see it clearly
in spite of all this dust; to realize now the
fact that experience will ultimately compel
us to recognize—that business should attend
to the affairs of business, that government
should attend to the affairs of government,
and that neither can take the place or do the
work of the other.

THE PENNSYLVANIA PLAN

THE delegates to the coming session of
the Pennsylvania State Grange will
have an opportunity to discuss and to vote
on a problem which is of the highest impor-
tance to the agriculture of the state—rural
electrification. That matter is now being
handled by the Joint Committee composed of
members appointed by the two industries. The
members of the agricultural group are chosen
by the agricultural organizations of Pennsyl-
vania. The Grange has two representatives in
this group and contributes to the support of
the Joint Committee's work. All these repre-
sentatives of agriculture serve without any
financial compensation.

The question which will confront the dele-
gates to the State Grange is generally wheth-
er this problem shall be handled in the future
as during the past four years, and particu-
larly whether the Grange shall continue to
participate as in the past. That is a plain busi-
ness proposition and should be considered as
such. No local or personal considerations
should be involved in such discussion.

In considering this problem the Grange
and all other organizations should remember
some recent history. Before the operation of
the Joint Committee chaos prevailed in rural
electrification. That Committee has brought
about order and a high degree of regularity
not complete uniformity in conditions under
which progress may be made and is being
made. In fact, under the Committee's oper-
ation rural electrification has advanced far
never before and to a degree impossible with-
out the aid of some such agency and aid as
the cooperation of the two industries has pro-
vided. Concessions that could not have been
secured for agriculture by law or by any
other means have been secured by coopera-
tion—and the end is not yet.

Let us consider also what alternative
action the Grange may take in case it part-
company with other agricultural organiza-
tions in supporting this work. The sugges-
tions which suggest such action are all so
vague to deserve serious consideration. They
call for some "better plan," but they do not
define any better plan. They call for com-
plete development, but they do not provide
any means for this electrical and financial
miracle. They refer, sometimes, to a "better
plan which is clearly inferior to what we now
have. In fact nearly all the plans examined
in this country and Canada, fail to show any
superiority over the plan now in operation
here, though in a few states of doubtful
topography the cost of rural lines is lower.

We hope and believe that when this prob-
lem is given impartial consideration by the
members of the Grange and other organiza-
tions they will vote to continue a method
dealing with it which has resulted in suc-
cessful progress, which is not surpassed any-
where and which is being accepted as a model
by other states dealing with the problem.

Pennsylvania Farm Comment

By MILES HORST

THE corn borer, the
Japanese beetle, the
oriental fruit moth and
the potato wart, all serious
plant pests, found their way
from other shores to this
country during the five-year
period preceding 1912, the
year the federal plant pest
act was passed, placing rigid
inspection on importations to
guard against more plant pests coming here.

Unlike the first three of these, which are
insect pests and well known by now in this
country, the wart is a germ pest which at-
tacks potato tubers, producing wart-like
growths which affect both the growth and the
quality of the tuber.

The potato wart was brought from the
British Isles, in shipments of potatoes made to
this country because of an acute potato short-
age here, and because no tariff was then in
existence, thus making importations profit-
able. These importations being of poor qual-
ity found their way chiefly into mining towns
of Pennsylvania and West Virginia. Some of
this imported stock was planted by miners in
their gardens and thereby the disease was in-
troduced in Pennsylvania soil, an introduction
which since then has caused potato growers
within the infected areas much grief and the
state considerable money.

The disease was first discovered here in
1918. Immediately a search was started
throughout the state by the State Bureau of
Plant Industry to determine the extent of the
infection. All imports were traced. Move-
ments of potatoes from infected areas fol-
lowed. A quarantine was at once thrown
about each area affected. It was found that
the chief infection was in the Hazelton area
of Luzerne county. Another was found in
Cambria county and minor ones in a half
dozen other counties.

In the British Isles where the wart disease
is quite a foothold, it is overcome by plant-
ing immune potato varieties, for curiously
enough certain varieties are entirely immune
to it. The State Bureau of Plant Industry be-
gan at once to determine the susceptibility of
American varieties. It was found that the
Rural types, which constitute 80 per cent of
Pennsylvania potato production, were particularly
susceptible to the disease. The Spaulding Rose was
found to be entirely immune. So the state allowed
this latter variety to be grown but no others.

The disease has been in the state since 1912.
Since 1918 every precaution has been taken to
keep it within bounds and by restricting plantings
within the infected areas to an immune variety an
effort is being made to starve it out. But twelve
years have not yet checked its virulence as is
shown in the experimental gardens near Hazelton
conducted by the State Bureau. While the state is
taking every precaution to check the spread of the
wart as well as attempting to starve it out, it also
is conducting extensive experiments under the di-
rection of Dr. R. E. Hartman to determine other
methods of control if there are any.

I call attention to this disease here because as
long as it does exist in scattered areas throughout
the state it offers a constant menace to Pennsylv-
ania's potato industry, particularly so since the
main varieties grown here are so susceptible to it.
Potato growers in this state can ill afford to
have any let up in the efficient campaign which
the state now is waging against it.

E. B. DORSETT, Master of the Pennsylvania
State Grange, in his annual report to the
National Grange now in session at Rochester, N. Y.,
offered the following suggestions as "helpful
and tending to stabilize and encourage agricul-
ture": "Stop further reclamation projects, limit
immigration and begin a nation-wide campaign for
reforestation. Quit gambling in food products, es-
pecially cereal grains. Prevent the greed and graft
which is practiced in marketing food products. Es-
tablish an orderly and less expensive system of
marketing and new uses for products that are now
wasted, and guarantee to the farmer a net return
on his labor, the same as the Public Service Com-
mission grants public utilities, and agriculture will
come into her own."

Unfortunately in his discussion of the features
of this suggested program to bring agriculture
"into her own" Mr. Dorsett touches only on re-
forestation projects, immigration and reforestation
in his report. He says no more about the other
features. We are curious to know how he would
proceed to "guarantee to the farmer a net return
on his labor." Since he refers to the Public Service
Commission and to public utilities, we wonder
whether he favors governmental regulation of
agriculture. Then too we wonder whether he would
be so uncharitable as not to favor guaranteeing to
business and to the professions a fair
return on labor. Nothing is said in this
program of taxation, of rural electrification, of



In the above picture are, left to right: Melvin Brandt,
Roy Koons and Paul Gates, all of Dauphin county. Paul
who will represent the Keystone State in the National
4-H Club Livestock Judging Contest to be held at Chi-
cago, November 28 to December 6, inclusive.

financing schools and roads. But then no doubt if
farmers were guaranteed net returns on their
labors, their interest in other matters would fade
out of the picture.

ROBERT GETZ of Carbon county has gone a
long way in overcoming a bad dose of quack-
grass on a farm he bought a year ago. His method
of attack is tillage and more tillage. Last spring

Sixty-Fourth Session of National Grange

ONE got the impression that it was being held
pretty well over Rochester, N. Y., during the
first two or three days of the session that began
November 12 and ended November 21. Over 11,000
members were there to receive the beautiful Na-
tional Grange Seventh Degree, which was given in
the magnificent Masonic Auditorium in two-hour
classes beginning 9 a. m. Friday and ending near
midnight. It was the largest class in the history of
the order, the nearest approach being at the Bos-
ton meeting a few years ago with about 9,000, the
next record being at Cleveland with over 6,000.
New York State Grange officers initiated 12,300
members the past year (533 on Thursday evening)
into the Sixth Degree, and about 10,000 of these
were on hand Friday to take the next step. Among
the initiates were two daughters of the New York
master and wife, Mr. and Mrs. Fred Freestone, and
Francis Taber, youngest son of National Master
and Mrs. Taber. These young people were in one
group used for exemplification of the work.

From 32 States

When National Grange Secretary Harry Caton
of Ohio called the roll 32 masters of the 42 state
Granges and their wives answered "Present." The
biggest one was the master of New Hampshire
Grange, John A. Hammond, 6 feet, 4 inches tall
and weighing 250 pounds. The smallest was D. B.
Anderson, master of the newly organized South
Carolina State Grange, who stands 5 feet, 2 inches,
and weighs only 125 pounds. Mrs. Hammond, wife
of the Granite State master, was elected to the
state senate a few weeks ago.

The second week of the session was devoted to
deciding further policies of the order, report of
which will be given in our next issue. Special
services in some of the churches for Grangers
were a feature Sunday, and Monday the delegates
went on a special train to see Niagara.

A preliminary feature of the New York State
Grange Sixth Degree work Thursday evening was

he plowed 100 acres on the
farm. After plowing he went
into the fields with a weed
hog harrow set deep enough
to catch the quack roots. He
harrowed the fields in this
manner frequently and after
each harrowing raked up the
roots and underground stems
of the weed. By June first he
had hauled off of the farm
32 loads of roots. During the second week of
June he planted the entire area to potatoes.

He continued to cultivate deep until the po-
tatoes were dug this fall, the weed hog was
then used as long as possible. After the po-
tatoes were dug this fall, the weed hog was
again put to work and harrowing weekly is
still continued.

Apparently the quack-grass is breaking
down under this severe punishment, for Coun-
ty Agent Rahn informs us that little of the
weed can be found. Incidentally Mr. Rahn
also says that the potatoes on this farm aver-
aged well on to 300 bushels per acre.

A NUMBER of farm families in Lancaster
county have asked the directors of the
Arcade Farmers' Market House in Lancaster
to set aside a section of the building where
they may each week contribute food products
such as apples, potatoes, etc., to be given to
needy families in that city under the care of
the local welfare organizations. In this ex-
pression of a kind and generous spirit these
farm folks are joining the millions of other
American people who this year, spurred on by
reports of privation among the less fortunate,
are pouring into the welfare coffers of the
nation greater contributions than ever before.

EVERY time we pay our gasoline bill, it
hurts to pay a tax of three cents a gal-
lon on gas used in our tractors and sprayer
engines," writes an orchardist of Berks coun-
ty. Of course it hurts, for this fruit grower
pays the state each year a tax on gasoline
used solely for orchard purposes amounting
to \$100 to \$150.

This man competes in the markets with
growers in adjoining states who are exempt
from the tax on gas used for agricultural pur-
poses. Nor is he alone in this matter. There are
some 30,000 tractor owners and 80,000 stationary
engine owners in the state who likewise are paying
this tax against their production which adds just
that much to farm production costs in this state.

The tax on gasoline used for agricultural pur-
poses is not a fair tax, but it will not be removed
unless farmers put forth an effort to have it re-
moved.

the illustration of the symbolism of the subordinate
Grange degrees by lecture and pictures by Dean
Alfred Vivian of Ohio State University, assisted
by Harry Caton and Prof. T. G. Watson, Ohio State
University.

Need of the Grange

Louis J. Taber of Ohio, master of the National
Grange since 1923, cited the merging tendency of
manufacturing, merchandising, financial and trans-
portation industries as a greater need than ever
for organized agricultural cooperation. Said he:
"If the Grange was needed in the days of our fathers,
it is needed a hundred times more today."

To meet changing conditions the Grange has the
following program: Better rural organization
along various lines; efficient and low-cost produc-
tion; a marketing structure that protects agricul-
ture; adequate financial facilities for production
and marketing; better transportation accommoda-
tion; and governmental equality in protection.

Business America, said Mr. Taber, expressing
itself in recent resolutions of the U. S. Chamber of
Commerce, criticizes the Federal Farm Board and
condemns the government for thus seeking to do
for agriculture what it has been doing for every
industry holding membership in the said Chamber.
Organized agriculture of today proposes to find a
way by constructive effort for building itself up,
not by pulling some other groups down. To this
end the Grange supported the Agricultural Mar-
keting Act, that has been in operation about 16
months.

Oil companies and various other industries, Mr.
Taber stated, have gone into retailing their own
products. Therefore the time has come for agri-
culture more largely to go and do likewise to se-
cure cost plus prices for its products. "It is a sad
commentary," said Mr. Taber, "on our wheat mar-
keting system that during agriculture's greatest
depression the Chicago Board of Trade erected a
\$12,000,000 44-story building." (Cont on page 19)

John Imberlay, Trustee

By Homer Green

Copyright, 1930, by Perry Mason Company.
Boston, Mass.

SYNOPSIS

There is a deep mystery about the trust under which John Imberlay, president of the Citizens' Bank of Briery, is acting as trustee. The creation and conditions of the trust and the beneficiaries are matters of which Mr. Imberlay alone appears to have any knowledge.

Mrs. Leighton, a widow, and her lame son, Robert, have just left Mr. Imberlay's office after an unsuccessful plea to have an extension of time on the long over-due mortgage on the farm. Mr. Imberlay has flatly refused their request but later seems interested in Robert and also in Rafe Orchard's neighboring farm and makes inquiries concerning both farms. Robert and his mother have tried without success to borrow money to save their home. A few days later they receive a letter from John Imberlay offering Robert a position in the bank and granting an extension of time on the mortgage.

"I'll be such a delight," she said, "to count money, heaps of it, piles of it, won't it, Bob? To play with it just as if it was leaves or sand; to take it up in double handfuls, like this, and let it drop through your fingers, so! O daddy! We'll put all our money into Bob's bank now, won't we?"

Poor Rafe! It had been many years since he had enough money to make it worth while to put it in anybody's bank. Ignoring June's flippancy, he turned again to Robert.

"You'll see a good deal of Mr. Imberlay at the bank, Robert?"

"I presume so," replied Robert. "I understand he spends most of his time there."

"Yes, he's always been very devoted to his work. That's why he has made such a success of it. I know something of his methods. I had some business with him at one time. I used to be well acquainted with him, but have not seen him in a good many years. He may have forgotten me." The man looked out over the landscape, purple in the fading twilight, but he saw nothing of its beauty. His mind was in the past.

It was a full minute before the silence was broken. Then Mrs. Leighton spoke. "Robert and I have been wondering," she said, "whether we couldn't make an arrangement with you, Mr. Orchard, to look after the farm for us in his absence; to take it on shares or something of that kind."

"O daddy!" exclaimed June. Then she suddenly checked herself.

Rafe Orchard had already risen from his chair, and stood bowing courteously to Mrs. Leighton. "The very thing I could have wished for," he said. "Not half an hour ago I spoke to June about my desire to obtain constant employment at which I could earn a steady income. This is exactly what I need. I am grateful to you for the proposition, and I shall be delighted to accept it."

He was sincere in his declaration. And he would have accepted the offer just as readily and with as little question as to terms if it had been made to him by a shrewd, self-seeking man instead of a conscientious and generous woman. It was his way. It had always been his way. He had often suffered from the meanness and trickery of others. But utterly unselfish and high-minded himself, he was unable to discover, or even suspect, duplicity or deceit in other men until the direct proof of it was forced upon him.

But Robert, being more practical, and with the importance of his proposed new business relations weighing heavily upon him, went at once into matters of detail concerning the partnership agreement between his mother and Rafe, and made written notes of them as they were discussed and settled.

During all this time June was silent. But when the matter of the lease was definitely agreed upon she exclaimed:

"I think it's perfectly lovely! It's just what daddy's been longing for ever since—oh, ever since seven o'clock this evening. Isn't it, daddy? And we'll get on famously. I'll help. Oh, we'll make a success of it, won't we, daddy?"

"I hope so, June."

"And it's so good of you, Mrs. Leighton, and you, too, Bob, to think of it—and to give daddy the chance, and to— isn't it, daddy?"

AND the next instant her arms were round her father's neck and her tears were falling on his face.

"There, June," he said, soothingly, "there, never mind! Of course we'll make a success of it. And I appreciate Mrs. Leighton's and Robert's confidence in me very much indeed."

June dashed the tears from her eyes. "It's all very delightful, anyway," she said. "How shall we celebrate it?"

The question had hardly left her lips when her attention and that of the others was attracted by confused noises from somewhere down the road. In the next moment they saw two horses come galloping, dragging at their heels a double-surrey, which was swaying violently from side to side. The driver of the frightened team was putting forth every effort to check its speed, while the other occupants of the carriage, a young woman and a girl of fifteen, clung desperately to their seats.

Rafe Orchard, still vigorous in spite of his almost sixty years, leaped from the porch, ran out into the road, seized the bridle of the nearest horse, clung to the bits, and jerked and dragged on them, until the team, already partially exhausted by its long run up the hill, was stopped just beyond the cottage, and stood, panting and trembling, while the occupants of the carriage were helped out, unharmed save by fright.

A tongue-brace had snapped in two while the

party was descending the hill near the Leighton place, and the startled horses had broken into a run. At the foot of the hill the driver had skillfully turned them up the cross-road toward the Orchard cottage. Although under the violent plunging of the carriage the other brace had also broken, the long ascent had so moderated the speed of the frightened animals that when Rafe Orchard leaped and grasped the bridle, he found it no great task to check and stop them.

The horses were released and tied to the hitching-post near the gate, while Mrs. Leighton and June helped the occupants of the carriage to the porch of the Orchard cottage.

An examination of the wagon showed that the only real damage it had suffered was the breaking of the braces; and the coachman, having removed the broken irons, started with them to the blacksmith's shop at the village to have them duplicated.

By the time Rafe and Robert returned to the porch the young ladies had partially recovered from their fright, and were ready to make the best of their adventure. They had already introduced themselves as Margaret Imberlay and her cousin, Elizabeth Brandon, from New York. June had urged them to have a cup of tea, and was in the kitchen preparing it for them. She had spread the table and placed the tea and crackers on it. When her guests entered the well-lighted room they looked about them with surprise, for, with all the evidences of poverty, and with the cheap and necessary furnishings and appliances for kitchen, dining-room and living-room, there were also books and pictures and bric-a-brac that might have adorned the library of a cultivated gentleman.

Miss Brandon's glance soon fell upon a little canvas standing on an easel in a corner of the room. It was one of DeHoeven's landscapes. Rafe and his daughter called it "The girl in red under the apple-tree," and they had always admired it greatly.

Miss Brandon kept her eyes fixed on it as she sipped her tea. Finally she inquired of June whose work it was, and on being told that it was by DeHoeven, she wondered still more.

"May I inquire," she said, "where you were able to get so beautiful a specimen of DeHoeven's work?"

"Oh, daddy has had that ever since I can remember," replied June. "I don't know where he got it."

"I SEE. It is evidently one of the artist's earlier compositions, but a very good example of his art."

"Daddy and I both like the picture. We took it to Briery once and tried to sell it,—that was when things were going pretty hard with us,—but somehow or other nobody seemed to want to buy. It looked to me as if they thought it wasn't genuine, or as if we'd stolen it, or something. Anyway, we didn't sell it, and I'm glad we didn't. I like to see it standing over there in the corner."

"What price did your father ask for it at that time?"

"Forty dollars, I think. He paid that for it. I told him I thought it ought to be worth at least fifty now."

"Is he still willing to sell it?"

"I don't know. I'll ask him, if you like."

"Never mind now. I'd like to see it in the day-time."

While Miss Brandon knew that the picture at fifty dollars would be a great bargain, she was no more ready to take it than were the people whom June had mentioned. She was no better satisfied than they that the painting was an original, or that the owner had come by it honestly. It was a strange state of things, anyway. Here was this laborer, pinched by poverty, as his surroundings indicated, yet with valuable books and

pictures about him. The more Miss Brandon learned about the room the greater became her curiosity.

She was still wondering when the coachman arrived and announced his readiness to proceed on the journey.

"I've had such a delightful evening!" said Margaret, as she stood at the carriage steps, holding June's hand. "May I come again to see you? Will you go with me some day for a drive?"

"You are very welcome to come again," replied June, "but I cannot promise for the drive. I'm daddy's assistant, you know; and we've just reached a farm on shares, and we shall be very busy."

"I shall come, anyway," replied Margaret, with a laugh. Then she turned to Rafe Orchard. "So grateful to you," she said, "for stopping at our horses! I almost feel that you have saved our lives. I shall tell papa so."

"I am very glad indeed to have been of service to you," replied Rafe, courteously. "I know your father a long time ago."

ON the day that Robert went to Briery to begin his career at the bank Rafe Orchard took up his work on the Leighton farm.

When he came home to supper that night spoke enthusiastically to June about the pleasure he found in his task, and about the brightness of his prospects.

"There is only one thing I regret," said he, "that is that I haven't money enough to put stock, seed, improvements and repairs, so as to make the farm yield its best income the first year. As Mrs. Leighton has no more ready money than I have, I guess we shall have to wait another year for the betterments."

"How much money would it take, daddy?"

"Oh, fifty dollars would give us quite a start. Can't you sell something and raise the money?"

"Why, there's nothing to sell, June, unless might be some of these pictures. And there's really nothing here worth selling except that. Heaven, I tried to get forty dollars for that one you know, and no one would have it. I would like to let it go, anyway."

"I know, daddy, but in an emergency like that must give way to necessity. You can buy pictures after you're rich, but it isn't like you'll ever have another chance to farm it shares. Let me take the picture to Briery and it for you. I'll go to Mr. John Imberlay. He's rich and I'll offer it to him for thirty-seven dollars and a half. There's a bargain for you!"

"Oh, no, June, no! I couldn't think of having you hawk my alleged art treasures about streets, much less offer them to John Imberlay. And really I shall get along very well with farm without the money."

On the next afternoon Margaret Imberlay came again to Broad Valley, accompanied, as before, her cousin, Miss Brandon. Margaret came because she had taken a sincere liking to this bright, impulsive girl and her strange and poetic face, and wished to see more of them. But Miss Brandon came with the avowed purpose of buying DeHoeven's picture of the girl in red under the apple-tree.

"Do you really want forty dollars for it, Orchard?" she inquired. June held her breath while her father answered.

"WORTHY, I presume—do you really think it's worth that money, Miss Brandon?"

"I think," she said, "that it is worth one hundred dollars. It would sell for that price with people know the value of pictures."

June said afterward that she never in her life came so near fainting away as she did at that moment. Rafe protested vehemently against accepting what he considered was an exorbitant price for the picture; but Miss Brandon finally prevailed on him to take the hundred dollars, and carried away the DeHoeven in triumph.

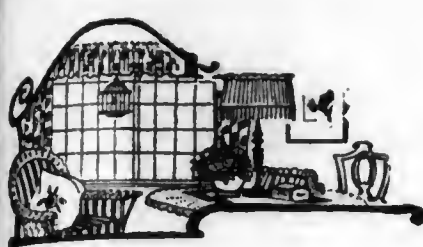
Rafe Orchard was jubilant. It was the first time in years that he had had a hundred dollars in possession.

There was one thing that he insisted on, that was that June should have half of the amount to spend for herself. But June would accept thirty dollars.

It is small wonder that during the next few days her fertile brain was kept busy making plans for the purchase of her outfit and conjuring up visions of simple loveliness in the way of summer attire.

When she finally went to Briery Mrs. Leighton accompanied her. They had a delightful day in the city shops. They had a brief visit with Rafe at the bank, and they were fortunate enough to run across Margaret Imberlay, and enjoy for time her sweet companionship.

(To be continued.)



Gobble! Gobble!

By GERTRUDE S. STEWART

IT was November first and a bleak wind was chilling the air when turkey enthusiasts of New Jersey and some of their neighbors gathered at the beautiful Greenwood Farms in Burlington county to study deeper into the raising and marketing of these royal birds. William J. Lippincott and his son, Samuel, were the hosts and proudly they told us of their adventures this season in hatching and raising a seventeen hundred flock.

With turkeys to the left of us and turkeys at our right, we were taught some of the factors of successful turkey raising by Mrs. Helen Baker, of Chestertown, Md.—and the large birds all round us gobbled gayly and noisily in applause.

I feel sure our women readers will be anxious to hear some of the things this national authority on turkey growing considers necessary to the raising of a good flock. She has been in the business for eight years, and is connected with the Maryland Department of Agriculture. She has taken into consideration the natural habits of wild turkeys; she has sat quietly in the brooder houses studying light situations and draft in their effect on the young poults. She speaks with authority, and we are glad to listen.

Ventilation Is Important

Here, briefly, we give you the main points in her plans. Hatching:—Mrs. Baker recommends that the natural moisture of the eggs selected for incubation be preserved. Keep the eggs in a cool, but not dry place. A cellar with no furnace is ideal. Set them on shavings in a box and cover with a blanket so that air cannot strike them directly and absorb the moisture in the shell. Turn them at least every two days. Every day may be better.

Grade the eggs as to size and hatch the three sizes—but do it separately and under circumstances that fit the egg size. All normal-sized eggs are hatched pretty generally, and the extra large and rather small ones are neglected. This is wasteful, according to Mrs. Baker, and should be stopped. Her experiments prove that large eggs produce large, strong birds for which there is great demand. The small eggs produce splendid birds—not so large—of course, but too good to neglect. Small turkeys are always needed, too, by the markets. Her experience is that size is not responsible for cripples—but moisture is, together with poor incubation.

Brooding:—Mrs. Baker has decided that a square brooder house with lights on four sides is best. She prefers that windows be high, thus preventing scary shadows which lead to fearful crowding among young birds. Ventilation is most important, yet drafts must be avoided. She advises a lining of roof paper to protect against drafts. Double wooden floors with an inner lining of the same paper are suggested.

Roosts Are Roof Covered

At the age of one week, the flock is invited to all about on low roosts made of simple lathing, and eagerly they accept. When three weeks old, a higher roost is given them and they seem to know exactly what it's for, and use it for sleeping—thus avoiding corner crowding at night.

Outdoor roosts are not included in Mrs. Baker's plans of protecting her birds. She says we all know that their lungs are on their backs, so why safeguard their feet (made for all sorts of weather) and expose their backs to the rain and sleet. She has all roosts roof-covered regardless of the age of the turkeys.

Feeding:—Mrs. Baker felt that every turkey grower was quite familiar with her feeding ideals, and gave little time to that subject. She uses a deal of meat scrap and semi-solid butter-milk in her ration, realizing that protein is by far the most important. If any of you wish for growing mash formula, write me for it and I'll send it gladly. She vigorously advocates whole corn, and starts slipping in a few whole corn crumbs at a very early age. She has the feed before the birds always. Wet mash is one of her favorites.

Keep coffee pots and percolators clean and well boiled. Coffee left standing in them will stain the sides and hurt the flavor of new coffee.

The Farm Home



All ready for Thanksgiving dinner.

At Thanksgiving

IN this season of scarcity, such as we in this neighborhood have never experienced before, many are the ways we women are stretching the family purse, and "doing over" from blankets to garments. I say, blankets, for they are my main problem this year.

Instead of the two new pairs we needed, we got one, and made the other of the better parts of two old pairs. A few seams, to be sure, but they won't break any bones and as I have remarked before, I like to get something out of nothing. We always split the pairs of blankets down the center and sewing the outside edges together, prolong their usefulness by half and I have gone so far as to cut them apart and sew the ends together, when the boys kicked them thin at the foot of the bed. It's an art to make up beds for lively lads. I have several extra length woolen comforts, that go on the outside of their covers and tuck securely under the foot of the mattress, but at that, I often find the whole outfit behind the bed.

Our unprecedented drouth has made us sober and thoughtful and caused us to realize how dependent we are on the Creator for sun and rain. Time after time did we in this section plant and sow, in the hope we would get something raised. Farm families have bought their vegetables from the town counters, as did the town women. Early in August we began to buy the winter's supply of feed, and trucks passed day and night, hauling.

Not Sufficient Unto Ourselves

Fruits have been trucked in from as far as Michigan and we have bought canned goods by the case, beans by the bushel and cabbage in 100-pound lots. We did not get the seed back from the large planting of potatoes. Some late plantings of corn, beans and tomatoes did well and the fortunate owners got the price they asked without any quibbling.

The county is organized for relief, but as in all things, some of the most deserving may not reap any benefit, though it is aimed to help all needs. On our creek we fare very well. We have in our cellars and barns the food and feed to get us through, even if we did have to buy it. We have not had to sacrifice the stock. That is the worst feature of the drouth for our country, viz., the selling out of the state young stuff that a farmer needs in order to keep moving along. The next two years will be very hard sledding for the small farmer, as he has nothing growing into money.

As the Thanksgiving season nears, we feel more than usual the dependency on a Higher Power. For the facts of life, health, right use of our minds, a Christian community, schooling facilities and a united friendship among our neighbors, we give thanks and humbly ask a continuance of the same. West Virginia. Nellie R. Nesselroade.

Something Different

COTTAGE cheese loaf makes an excellent main dish. Mix together one cup cooked kidney beans, one cup cottage cheese, one-half cup ground peanuts, one cup of bread crumbs, one cup of boiled rice, one tablespoon chopped onion, one tablespoon of savory fat or drippings, one cup tomato sauce and salt and pepper. Form these into a roll, brush it over with melted fat, and bake it in a slow oven for thirty-five minutes. Serve with a medium thick white sauce to which has been added two tablespoons of minced sweet red pepper.

Cooking the Turkey

MUCH has been said of the traditional connection between Thanksgiving and a turkey dinner in this country. In most American homes it is taken for granted that the family meat will center around the royal bird. In a very small household, a turkey may seem impractical, as it is usually necessary to buy one weighing at least seven or eight pounds; a large chicken or a roast meat would answer the needs of a home where only two to four persons will share the dinner. But turkey is a good choice for the family of six or more, or the household that will be increased by visiting relatives or invited guests.

Different stuffings are used for the turkey. One of the most popular is made simply with dry bread crumbs seasoned with butter or turkey fat, salt, pepper and the usual herb flavors—thyme and sage. Another good stuffing is made with chopped cooked chestnuts, bread crumbs and seasonings. The Bureau of Home Economics describes a chestnut stuffing in the following recipe for roast turkey.

For ten to twelve-pound young turkey: One pound large chestnuts, one-half cup butter, or one-fourth cup butter and one-fourth cup turkey fat, one-half cup minced onion, one-fourth cup chopped parsley, two cups chopped celery and tops, six cups fine, dry bread crumbs, two teaspoons salt, one-fourth teaspoon pepper, one teaspoon savory seasoning.

Just How 'Tis Done

Draw and singe the turkey, remove the oil sac and pinfeathers, cleanse thoroughly, and wipe dry. Cook the chestnuts in boiling water to cover for 20 minutes, remove the shell and brown skin while hot, and chop into medium-sized pieces. Melt the butter in a skillet, cook the onion, parsley and celery for two or three minutes, and stir frequently. Combine the bread crumbs, chestnuts, salt, pepper and savory seasoning, add to the celery mixture, and stir until thoroughly mixed and hot. Sprinkle the inside of the turkey with salt and fill with the hot stuffing, but do not pack. Fold the wings back on the neck. Tuck the legs into a band of skin and flesh below the tail, or tie them down. Sew the cut surfaces so that the stuffing will not fall out or become moist when baked. After the turkey is stuffed and trussed, rub the surface with butter, sprinkle with salt, pepper and flour, lay a piece of fat over the breastbone, and put on a rack in an open roasting pan.

Place in a hot oven (about 450 degrees F.) to sear for 30 minutes. Reduce the oven heat to moderate (350 degrees) and continue to roast for about two and one-half hours longer. Baste occasionally with the drippings and turn the turkey first on one side and then on the other so that it browns well all over. Test for "doneness" by piercing one of the thighs as it lies near the breast, and if the juice does not show a red tinge the turkey is done. Another test is to lift the wings and see whether it will be easy to disjoint in carving. Serve on its back on a large, hot platter, garnish with parsley or celery tops and make sauce from the giblets and drippings.

The Autumn Berry

THE cranberry is one of the most wholesome fruits to balance cold weather diet and there are now many ways of serving it which transform the humble berry almost beyond recognition. Here is a cranberry relish which will prove a delicious friend in need. It makes a delightful variation from the usual cranberry jelly to serve with cold turkey, chicken or duck, or it may be served for supper as a cake filling.

Cranberry Relish

One-half cup quick cooking tapioca, one-fourth teaspoonful salt, one-fourth cup seedless raisins, one quart cranberry juice and pulp, strained and heated, one cup sugar, four tablespoons walnut meats chopped fine, four oranges, peeled, sliced and quartered.

Add tapioca, salt and raisins to cranberry liquid and cook in double boiler 15 minutes, or until tapioca is clear, stirring frequently. Add sugar, combine nuts and oranges and add to tapioca mixture. Chill and serve as sweet relish with food or meat.



Paupers' Holiday

By Hilda Richmond



I was early in January that a glib-tongued individual called at the trim farmstead of the Widow Blansfield, as the owner of the place was known in the neighborhood, with gilt edge securities at the ridiculous price of thirty-five dollars per share. The stock, according to the agent, was paying eight per cent in dividends, and the oil company was bound to make each stockholder fabulously wealthy. He had looked up the Widow Blansfield, and had discovered that in addition to the trim farm she had much fine livestock, that she was able to send her son and daughter to college, that she was regarded in the community as a shrewd as well as a wealthy woman, held up as knowing much about farming and one who managed in a way that few of the neighbors could boast though she had been a widow of fifteen years standing.

The slick agent sized her up as a comely, capable person of about forty-five, proud of her attainments and with a wholesome contempt for those who were "slack," but he remembered that it takes the so-called shrewd persons to fall for his kind of wares, so he praised her country dinner lavishly, talked of his mother who had weathered hard times and brought up a family, agreed with what she said about the best farm relief being the kind farmers provided for themselves, and then sold her two hundred shares of stock, promising to keep the transaction a profound secret.

By the middle of February the Widow Blansfield and all the neighbors realized that she had been duped, and she was down in bed with the doctor coming daily and her anxious son and daughter home from college trying to manage the affairs of the farm. She refused to see any one but her children and her doctor, not even allowing the minister to get a glimpse of her. John Makemson, who had asked her to marry him whenever he could get a chance, hovered about the home letting his own farm get worse looking, as he anxiously tried to see her and propose that he would help her out of her financial difficulties.

"Bob, Dorothy, there really is nothing the matter with your mother except the loss of that money," said the doctor to the two Blansfield children. "You must rouse her out of the apathy and disappointment into which she has fallen."

"And how?" said the two worried young folks.

"That's what I don't know," said the old doctor rubbing his chin reflectively. "Tell her you are going to run away with Bill Garland and marry him, Dot," he suggested on a venture. Dorothy's eyes brightened. It had long been known that Mrs. Blansfield did not approve of Bill. "Do you think that would help?" she asked eagerly.

"It might," said Dr. Holman backing down a little. "And you, Bob, try to get her out of bed on the plea that the farming is going wrong."

"I've done that," said Bob despondently. "I told her that the colt kicked our best cow and three of the sheep were stolen, but she hardly listened to me. I tell you, Doctor, Mother's in a bad way."

THINGS went from bad to worse. Mrs. Blansfield had been the kind to take all the management into her own hands, the poor young people knew little about managing. Taxes came due and nearly worried Bob to death, while the interest on the first debt the farm had ever known in their occupancy loomed like a cyclone in the near distance. And still Mrs. Blansfield turned her face to the wall and refused to come out of her room. By hook and by crook the nightmare of present debt was met and at the approach of Thanksgiving the young people began to plan timidly for a celebration in the good old time way that might rouse their mother. But when the smell of mince-meat penetrated her bedroom she roused herself sufficiently to say that she had no interest in the approaching holiday.

"We are paupers," she said sadly, "and we'll have a paupers' holiday. Plain pork and potatoes are good enough for poor folks. It won't be long

until we'll be on charity. I must have lost my senses to listen to that agent, but it's done and can't be undone. And now I don't want to hear a word about a celebration of any kind. What's that? You've invited Bill Garland and Eleanor Green and John Makemson to dinner! Well, if you have, pork and potatoes are good enough for them. John Makemson's place looks like distress and the Greens never were noted—, but there, what am I talking about? We are all paupers together, and I have no need to criticize my neighbors."

"Don't you'll kill yourself with work and worry," said Bill Garland anxiously. "Let's run away and get married."

"It isn't necessary to run away now," said Dot, "but I can't leave home until my mother sees things in a different light."

"That will be never," said Bill bitterly. "You know old folks are always easy marks for sharpers, and you'll miss your education and everything worth while taking care of a woman who isn't sick at all." To Bill forty-five years was old age and he was sure Mrs. Blansfield was in her dotage.

"I'll bet if you'd come up missing some morning

We Thank Thee

By C. P. McDONALD

We thank Thee, our Father, for faith to plod on
Where our sanctified betters have manfully gone:
For hearts that are clean, and for strength and for strife,
For valor in facing the problems of life;
For hope of the future, for unanswered prayers,
For happiness, fortitude, courage, and cares;
For what you have given or taken away,
We thank Thee, Oh, God, on this Thanksgiving Day!

We thank Thee, our Father, for laughter and pain,
For hope-building sunshine, for life-giving rain;
For power to plant and to nurture and reap,
For the love that we give and the love that we keep;
For innocent childhood and peace with the years,
For sorrow and joy and the solace of tears;
For sharing our crosses and showing the way,
We thank Thee, Oh, God, on this Thanksgiving Day!

We thank Thee, our Father, for work in the fields,
For crops that are meager, for bounteous yields;
For homes and for friendships, for joy and for grief,
For dependence on Thee and unshaken belief;
For guidance that lifts us, for lighting the way,
Through tempest-tossed nights for the glory of day,
For gains or for losses, for health or decay,
We thank Thee, Oh, God, on this Thanksgiving Day!

she'd get right out of bed and get Bob's breakfast."

"Let's go ahead and have a decent Thanksgiving dinner whether she likes it or not," said Bob, who was present with Eleanor Green at the conclave in the kitchen. "We've worked hard and we deserve something. Maybe if she hears the dishes rattling and smells the food she'll get mad and come out. Once she's up and sees how this farm looks she'd stay up, I'll bet money on that."

"Why don't you fill the house with smoke and yell fire," said Bill grasping at a straw. "I'll do it myself if you'll let me. I could rush in then and carry her out. You two go off to town, or hide in the barn, and I'll put the plan through." As he outlined it the idea grew wonderfully plausible in his mind. "I'd set her down right by the wood house that was wrecked in the wind storm, or those apple trees that you've never had time to chop up for wood."

Dot and Bob didn't like the deception, but they did announce to their mother that they were going away for a short time leaving Bill to put his brilliant scheme into immediate execution. With Eleanor he hid in the barn and presently Bill came staggering forth with his burden, both of them gasping and strangling in the smoke. Bill had carefully avoided the kitchen where some trash in the range was supplying the smoke, but he did lay the blanket wrapped woman on the ground near the wrecked wood house and the fallen apple trees.

Bill began to yell with night and main accord-

ing to the prearranged plan, but Mrs. Blansfield remained on the ground with her face covered. Bill valiantly dashed into the house to open the drafts and cover the open holes on the range, coming back with the cheering news that Mrs. Blansfield could now rise and enter her home because the danger was over. But the anxious watchers from the barn saw the football star pick up the inert figure and carry her back into her darkened bedroom. Three minutes later as he wiped beads of perspiration from his red face he owned that the case was hopeless.

Youth cannot remain hopeless forever and as Dorothy got out the long unused best silver and china and prepared the Thanksgiving dinner she hummed a little tune. The two workers planned to carry their mother out to the lounge in the dining room whether she wanted to come or not and see if the sight of the good old-time foods served in good old-fashioned way would not rouse her. Everything looked so gay and bright that even Bill came out of the dumps.

"A letter, Mother, from the Golden Fleece Oil Company," said Dorothy tremulously. She had debated an hour about showing it to her mother, but it had a special delivery stamp on it, and might be important.

"I don't care to hear from those swindlers," said Mrs. Blansfield but Dorothy resolutely broke the seal and began reading. Perhaps here was the very thing that would rouse her mother.

"WHAT do you think! Your stock is worth fifty dollars a share right now and going up! Listen to this, Mother!"

Mrs. Blansfield sat up as if shot. "Let me see it!" she said.

Dorothy obediently handed over the letter which certainly looked important enough, and raised the shades as her mother could read. "Hand me my clothes!" said the lady sharply. "No, I'll get them myself. I've been waiting so long enough."

Dorothy was glad to be excused, for after notifying Bob at the barn she rushed to the telephone to get hold of Bill before her mother could finish hunting her belongings so long unused. "You can have the telephone to tell Nell, as soon as I get through," she panted, beating her brother to the instrument. "I got here first."

By evening the news flew round the neighborhood that the Widow Blansfield was up and helping with holiday preparations, and some of the more curious neighbors made excuses to call and see if it were really true. News over a party telephone line travels rapidly, but some folks had for their motto, "Seeing is believing," so they went in person to find out. Old Mrs. Pepper called to get a recipe for mince-meat, though her pies were all baked and ready, while Mrs. Tanner, the authority on all gossip in the community was already there to borrow a cup of sugar, though she bought that household necessity by the hundred pounds. Both ladies tarried to chat a little while and incidentally get what items they could gather. Mrs. Blansfield seemed entirely herself and was inclined to give out information freely.

"You know that oil stock I bought last January?" she said carelessly. "Well, I thought, and everybody else thought, it was a swindle, but got word this morning that it had gone up to fifty dollars a share. I could make a cool three thousand dollars on my investment, but the letter advised me to hold on as it was still rising. I may sell and I may hold on."

The day was beautiful as heart could wish and Dorothy and Bob wondered if the events of the past ten months had been a nightmare, or whether it really could have happened. Their mother was pale and weak from her long stay in a darkened room, but her old spirit asserted itself and they were blissfully happy. Mrs. Blansfield beamed on Bill though he was still the "pauper" that she had always designated him and Eleanor Green received a gracious welcome to the feast. Even John Makemson was radiantly happy and planning fitting time to

(Continued on page 12.)

TWO HELPERS INSTEAD OF ONE IN EVERY BAR
That's why

FELS-NAPTHA GETS YOUR CLOTHES SO BRIGHTLY CLEAN

THERE'S a very good reason for that bright sparkling look that Fels-Naptha washes always have.

For Fels-Naptha brings you extra help that gets clothes cleaner. It brings you the extra help of good golden soap and plenty of naphtha, the dirt-loosener. Working hand-in-hand, these two helpers search every fibre and thread of your clothes. They dissolve grease. They loosen clinging dirt and wash it away—thoroughly. And when clothes come off the line, they're bound to be fresh and sweet and bright—because they're clean through and through.

Remember, too—it's this extra help that makes Fels-Naptha the real soap bargain. It saves YOU! Use it in tub or machine; for soaking or boiling, in piping hot, lukewarm or even cool

water. Fels-Naptha works so quickly that your hands stay in water less time. Which, of course, helps keep them nice. Get a few bars or the convenient ten-bar carton at your grocer's today!

SPECIAL OFFER—We'll be glad to send every user of laundry soap a Fels-Naptha Chipper. Many women who chip Fels-Naptha into their washing machines, tubs or basins find this chipper handier than a knife. Use it and Fels-Naptha to make fresh, golden soap chips (that contain plenty of naphtha!) just as you need them. Send only a two-cent stamp to help cover postage, and we'll mail you this chipper without further cost. Write today. Dept. 7-11-22. Fels & Company, Philadelphia, Pa.

THE GOLDEN BAR WITH THE CLEAN NAPHTHA ODOR

FELS-NAPHTHA

Read through this paper carefully. You will find advertisements covering almost every human need. They are filled with hints for the household, hints for health, hints for clothing. Also large numbers of seed, poultry, stock food and implement advertisements. When answering them, mention Pennsylvania Farmer.



The Beret is Easy to Make

No. 7022—Ladies' dress. Designed in sizes 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 46-inch size requires 4 1/2 yards of 35-inch material. For contrasting material 1 yard 39 inches wide cut crosswise is required. Price 15c or two for 25c.

No. 7043—Girls' dress. Designed in sizes 2, 4, 6 and 8 years. A 4-year size requires 2 1/2 yards of 35-inch material. If made without sleeves and with flounces. Price 15c or two for 25c.

No. 6991—Nursery toy. Cut in one size, about 16 inches from the head to the tail. It will require 1/2 yard of 35-inch material. Price 15c or two for 25c.

No. 6992—Sister and brother suits for dolls. Cut in six sizes: 14, 16, 18, 20, 22 and 24 inches in length. To make both suits of one material 35 inches wide, will require 1 yard for a 16-inch size. Price 15c or two for 25c.

Designed for three sizes: Small, 20 1/2 inches; medium, 22 inches; and large, 24 inches head size. To make No. 1 in a medium size will require 3/4 yard of 30-inch material. No. 2 will require 1-3/4 yard of 39-inch material if made without facing. With facing 3/4 yard will be required. Price 15c or two for 25c.

No. 7076—The illustration marked No. 1 portrays the popular Beret. No. 2 shows a sectional cap of the Beret order, with or without a broad facing. These caps or berets may be made of jersey, felt, tweed, angora or velvet.

HOW TO ORDER

All patterns 15c each, two for 25c. Be sure to give number and size. Address Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

The Ideal WHITE LIGHT for the Home without Electricity

NOTHING will add more to the joy and comfort of living in the home where oil is used for lighting than this wonderful new Instant-Light Aladdin kerosene mantle lamp. Gives a flood of pure white light equal to 10 ordinary lamps and next to sunlight in quality. Highly efficient—lasts a lifetime. Odorless, noiseless, smokeless and troubleless—children run it. Absolutely safe. Ask to see it.



New INSTANT LIGHT

Aladdin KEROSENE MANTLE LAMP

Table—Bracket—Hanging—Vase or Floor Lamps—Hand decorated Shades in Glass or Parchment.

The Mantle Lamp Company of America, Inc. 609 W. Lake Street Chicago, Ill.

Burns Kerosene Coal Oil

Ask Your Dealer If your Dealer cannot supply you write us for full information

How to keep Warm in Zero weather

Wear an Indera COLDPROOF KNIT SLIP



You don't have to bundle up like an Eskimo to keep warm this winter. A light weight, smart, fitting Indera Figure Knit Slip gives you all the warmth you need, even in the coldest weather.

For Indera is knitted by a special process that keeps warmth in and cold out. And you can wear it underneath your night frock. For Indera never annoys you by bunching between your knees or riding up around your hips. The patented border prevents that. And the shoulder straps stay in place always. They're STA-LIPS found only on Indera.

Indera is made in a wide variety of fast color combinations. All wool, wool and rayon, wool and cotton, also cotton. Easy to launder without ironing.

At your favorite store. For women, misses, children.

Indera Style Folder No. 25 in color sent FREE. Please mention dealer's name and address.

INDERA MILLS CO.
Winston-Salem, N. C.



Kill Rats Without Poison

A New Extremator that Won't Kill Livestock, Poultry, Dogs, Cats, or even Baby Chickens

K-R-O can be used about the home, barn or poultry yard with absolute safety as it contains no deadly poison. K-R-O is made of Squill, as recommended by U. S. Dept. of Agriculture, under the Connable process which insures maximum strength. Two cans killed 578 rats at Arkansas State Farm. Hundreds of other testimonials.

Sold on a Money-Back Guarantee. Insist upon K-R-O, the original Squill exterminator. All druggists, 75c. Large size (four times as much) \$2.00. Direct if dealer cannot supply you. K-R-O Co., Springfield, O.

K-R-O
KILLS-RATS-ONLY

ACHES & PAINS

Quick Relief With JAPANESE OIL

"Don't Let Pain Keep You At Home." Used in millions of busy people instead of hot water, ice, electric bottles, Grains, Salts, Alcohol, Liniments, for Rheumatism, Neuritis, Sore Muscles, Sprains, Stiff Joints, Chest Colds, Coughs, Sore Throat. Rub it on or breathe aromatic vapor of Jap. Oil. Generates a pleasant soothing warmth that drives out pain quickly. Worn here or bottled for your skin. 45 years success behind it. At drug or general stores.

CUTICURA

Soap for daily use.
Ointment to heal skin irritations.
Talcum ideal after bathing.
Price 25c each. Sample free.
Address: "Cuticura,"
Dept. 78, Malden, Mass.

"Write for booklet"

BOOKLETS that are offered through advertisements, usually without cost to you, stand the advertiser anywhere from ten cents to a dollar apiece. He is willing to send them to you free because he believes that you are really interested in the goods or the service he has to sell.

Read the advertisements in this paper. When booklets are offered on subjects in which you are interested, write for them, mentioning this publication. Advertised goods of known quality are safer to buy than unadvertised goods of unknown or doubtful quality. Read the advertisements.

Poultrymen in France

By H. C. KNADEL

WE arrived in Paris on Saturday night about 10:30 and after a good night's rest went on a sightseeing tour of the city. As we were seated in our buses, we noticed across from our hotel a small meat shop. There in French were written these words, "Horse Meat" and "Mule Meat." Scrutinizing the shop more closely, we observed the side of a horse hanging in the window. A native came down the street and stopped at the meat shop. The butcher removed the side of horse from the window, cut out two ribs, wrapped a small piece of paper about the middle with both ends of the meat sticking out and away went the purchaser with his Sunday dinner.

A good Canadian friend told the party that on at least four occasions we had all eaten horse meat and pronounced it good. He claimed he knew since he had had previous experience in this art and furthermore had his suspicions backed up by the word of the hotel proprietors. If we were going to be in Paris but five days perhaps we could eat a little horse meat and gradually get used to it. We did.

Visit Foch Tomb

When our sightseeing tour got under way, we visited first old Paris, situated as it is on an island made possible by the branching of the river Seine. We saw Victor Hugo's home, the interior of the beautiful Notre Dame Cathedral, the Parthenon built during the reign of Louis XV and now used as a memorial building for the great men of France. Soufflot who built the church used no cement. Fearing that the structure might fall down, and due to constant worry, he died within one year after its completion. The building still stands after several centuries and appears to be good for many more. Worry, not work, killed this great builder.

Among the sights visited were the Courts of Justice, the Royal chapel in which we saw a part of the old Roman wall built in 200 B. C., the University of Paris, the Opera House, the largest theater building in the world, the spot where the guillotine stood that snuffed out the lives of some 2,000 people, some of whom were royalty: the Obelisk, the Grand Palace used for wounded French soldiers and built by Louis XIV and still used for the same purpose. In this magnificent building Foch and Napoleon are buried.

Where Kings Were Crowned

An all-day trip was made to the American battlefields, visiting such historic spots as the general headquarters of Generals Joffre and Maunoury; the first battle of the Marne and LaFerte sous-Jouarre in which the second division of the United States Army received its baptism of fire. From there we passed through Montreuil Aux Lions and then to Belleau Wood. Here the United States government has established a most fitting memorial. Dugouts, machine guns and barbed wire entanglements are left as they were. A beautiful memorial building is now in construction. From Belleau Wood the party proceeded to Chateau Thierry and to Reims. What a pity it was to demolish such a beautiful structure as the Reims Cathedral. Thanks to a philanthropic American, the church is being fully restored. In passing, it is interesting to note that all the kings and queens of France except Napoleon I were crowned in this cathedral. Napoleon's coronation took place in Notre Dame in Paris.

France is noted among other things for its wine. We inspected one rather extensive wine cellar with five miles of walks underground. Five million bottles of champagne were in storage in this one cellar. During the War these wine cellars were used for

school rooms. There the children were relatively safe from modern methods of warfare.

After a short rest, we proceeded to Rethonde where the Armistice was signed. This is a most impressive spot. The famous railroad car was viewed in which General Foch and his associates as well as representatives of the German forces signed the Armistice. A concrete building has been constructed about the car as a means of protection. Each chair about the table is labeled. Six days before the Armistice was signed two railroad tracks had been built leading to Rethonde; one for the Germans and the other for the French. What

Paupers' Holiday

(Continued from page 10.)

ask Mrs. Blansfield to marry him. The feast was all that other feasts had been and more besides. Evidently Mrs. Blansfield had forgotten mortgage, taxes, damage by wind storm and the other things her precious farm had undergone. She was in her element directing, working, urging her guests to eat and entering into every part of the celebration.

"A gentleman to see Mr. Makemson," said Dorothy, who had gone to answer the door bell. Interruptions and calls had been so common for the past day or two that no one made any comment. Mr. Makemson reluctantly took his departure just as the plum pudding came on while the others at the table urged him to bring the man right out to dinner lest he lose something of the feast. But the stranger and John talked at some length in the living room, and when Mr. Makemson appeared it was easy to see that he had heard bad news, though he ate his cold pudding and tried to enter into the merriment.

"John, you are ill," said Mrs. Blansfield as her guest put his hand to his head and turned deathly pale. "Nothing at all," said Mr. Makemson feebly. "Perhaps something I ate did not—" and he fell fainting to the floor.

Naturally all was confusion, but Mrs. Blansfield quickly quieted the frightened young people and set them to work. The doctor was sent for and together they worked with home remedies before he arrived to restore consciousness and try to discover what was the difficulty. It was three in the afternoon when the house resumed its normal condition and the doctor said it was perfectly safe for the young people to go out as they had planned.

"Be back in two hours," he privately warned the members of the party. "I don't think there is any danger, but you cannot tell. The cause of the attack is obscure as John has always been very healthy. Mrs. Blansfield knows what to do and she can easily get in touch with me. I have some patients to see or I'd stay myself. Don't worry! Even if John is suffering it gives Mrs. Blansfield something to take her mind off her troubles. It is perfectly wonderful how much she has improved, and when you have time, Dot, I want you to tell me how it all came about. I only got home from New York last night and knew nothing of this. I was amazed to find her herself today."

"Her oil stock turned out to be very profitable," said Dot simply. "Bob and I had nothing to do with it."

"So that's it," mused the old doctor. "Well—that is surprising for— And then he evidently thought better of what he was going to say and broke off abruptly. "Run along now and have a good time. You've had a

pity that six days were required before final negotiations could be made.

On our return to Paris we visited the world famous aerodrome of Le Bourget where Colonel Lindbergh landed in his flight from New York to Paris. The rest of our time in Paris was spent visiting art galleries, the Louvre, shops, theaters and other places of interest. The weather was becoming quite hot, though for eight weeks previous, while the United States was sweltering, we felt the need of a topcoat throughout the day. Traveling, as we did, nearly 14,000 miles, we were all glad when the day for sailing arrived. It was a grand and glorious trip, fully enjoyed by all, but how glad we were to know that there was a place on this old world called "The United States of America" and that in a little nook in that great republic was our humble "home, sweet home."

mighty hard year of it and you deserve some fun."

Left alone with the patient Mrs. Blansfield sat quietly by the lounge, but suddenly John Makemson sat bolt upright. She tried to induce him to lie down, but he would not listen. "I've got to tell you something, Molly," he said penitently. "Maybe I won't live till morning and I can't die with a lie on my soul."

Mrs. Blansfield was thoroughly alarmed and she made as if to call after the departing young people. "Sit down and listen to me," said John grasping her hand. "I'm not out of my head as you think. I did faint for the first time in my life from the shock of what that man told me but I'm better of that."

Mrs. Blansfield had forgotten entirely the caller who had interrupted the dinner, so she was fully convinced that he was raving. "There! There!" she said soothingly passing her hand over his brow. "I understand. Lie down and you'll be better soon."

"I tell you I'm sane," said John impatiently. "I was the one who sent the letter telling you about that worthless stock. I just couldn't see you pine away there in that dark room. I was hungry for the sight of you and I got desperate. I went to the city and hunted up one of those scoundrels and made him write the letter. And I thought if you did decide to sell the stock I'd pay it out of my own pocket. I tell you, Molly, I was worried to death about you."

Then Mrs. Blansfield was sure she had lost his mind. John Makemson with his shabby place planning to pay her ten thousand dollars! Feebly she tried to rise to call the doctor, but John held to her hand. "I know it sounds crazy, Molly, but I got that Uncle Henry had left me ten thousand dollars, so it was perfectly safe."

"And you'd take your legacy and pay me for my foolishness?"

"We all make mistakes," said John comfortingly. "But you haven't heard the worst. That man who called today told me that they had found a late will and Uncle Henry left all his money to Cousin Abigail."

"Is that all?" said the widow Blansfield in her old spirited manner. "If that's all we'll soon remedy that. What's a little money lost to happiness?"

"But you are still in debt and—"

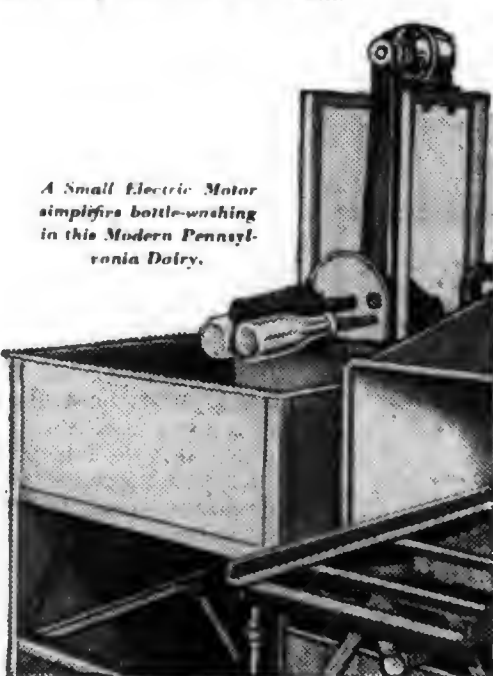
"Listen to the man," said Molly Blansfield happily. "Who's afraid of debt? We are both young, and we'll get out somehow."

"That makes me well," cried John. "Paupers' Thanksgiving! It is the way poor folks spend holidays. I'm willing to be a pauper all my life. Only I couldn't be if I have you."

"And I'm rich if I have you, John. I wonder I didn't see it that way long ago."



THERE is an electric motor for doing any job about the house or farm. Can anyone afford to do by hand work which a motor will do at a cost of from 1c to 5c per hour? In industry, the eight hour day is generally accepted and a five day week is being advocated and adopted; but on the farm, long hours still prevail and much of the work, particularly the chores, requires a seven day week. With the motor there is no question of hours per day or days per week. It works twenty-four hours a day and seven days a week, thus greatly reducing drudgery and long hours on the farm.



Electric Motors for all kinds of work

A few of the more common jobs the electric motor is doing in a better and more dependable way and at less cost than could be done by hand.

AN ELECTRIC WASHING MACHINE—usually operated by a 1/4 h.p. motor furnishing power for both washing and drying clothes—takes the drudgery out of "Blue

Monday" and saves the strength of the housemaker for more important duties. Requires about 1 K.W.H. for three hours' operation.

A VACUUM CLEANER not only takes the hard work out of sweeping but does the job in the most sanitary manner by sucking all dirt and dust into a bag. Requires only 1 K.W.H. to operate for about 13 hours.

A WATER SYSTEM requiring a 1/4 h.p. to 1/2 h.p., under either gravity or pressure system, will maintain a constant supply of water at all points in the house and barn, the size of the motor varying with the depth of the well and the capacity required. Commonly, 1 K.W.H. will pump 500 gallons of water. What would it cost to do this by hand?

Other equipment, like the sewing machine, electric fan for cooling and ventilating, and the kitchen heater for use in pastry making, whipping cream, etc., hardly affect the monthly bill.

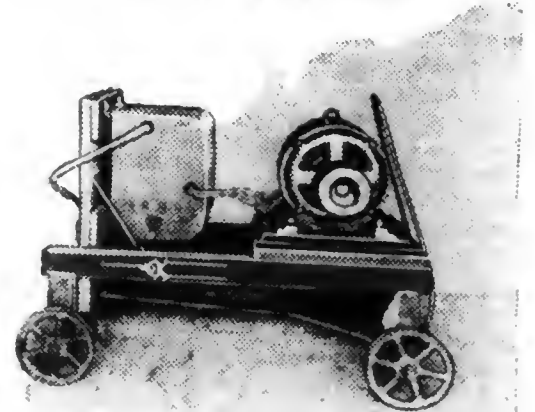
The Portable 1/4 h. p. motor about the farm

For grinding tools, shelling corn, grading fruit, potatoes, etc., a convenient, portable 1/4 h.p. motor is just the thing. Many good fishing trips have had to be passed up by the boys in order to turn the grindstone; many ragged jobs of moving have been done with knives not sharpened; much unnecessary energy has been expended, chopping with a dull ax or hatchet. A convenient motor-run tool grinding outfit overcomes all of these. The cost of current used for such jobs is so small that one farmer summed it up by stating that "it was not worth counting." In his case it was less than 1c per hour, for his current consumption brought him within the 3c per K.W.H. rate.

Stationary motors

Other frequently recurring jobs make it desirable to have a motor permanently installed. In the milking machine, the motor furnishes a constant dependable power, giving the best operating results. The size of the motor varies from 1/4 h.p. to 1 h.p., depending on the type and the make of the machine. For farmers who go to market once a week, a 1 or 2 h.p. motor for grinding meat is almost a necessity. Time is too

valuable to run a grinding machine by hand, particularly when it costs but about 5c per hour to do it with electricity. A small motor, varying from 1/4 to 1/2 h.p., furnishes the power which operates electrical milk cooling units, ordinarily requiring about 1 K.W.H. of current to cool 100 lbs. of milk.



A Portable Electric Motor does many a good job of grinding, shelling, sorting and other important tasks at a minimum of time and cost.

Larger, portable motors, ranging from 3 h.p. to 7 1/2 h.p., are available for the heavy power jobs. In wood sawing, feed grinding, and silo filling, they accomplish remarkable results. Write the Pennsylvania State College for a bulletin, "Progress Report on the Use of Small Electric Motors," which describes the results secured with a portable utility motor in such work.

Motors do many things and cost little to operate

Uses for the motor are almost unlimited. With few exceptions, electric rates, after a certain consumption, are as low as 3c or less per K.W.H. But whether the rate is 10c, 3c, or 3c per K.W.H., the cost of operation is many times less than that of doing the same job by hand. One farmer found that the use of a 1/4 h.p. motor on his potato grader, at a cost of 30c for current, saved him paying a hired man for three days at \$3.00 per day. Taking into account the many places where the motor can be put to work, ending the drudgery of many jobs, doing some of them better and all of them much cheaper, there is ample proof that

"IT COSTS MORE TO DO WITHOUT ELECTRICITY THAN TO USE IT"

Published in the interest of Rural Electrification by the

Bradford Electric Company
Chester County Electric Company
Chester Valley Electric Company
Duquesne Light Company
Edison Electric Company
Edison Light & Power Company
Erie County Electric Company
Erie Lighting Company

Keystone Public Service Company
Luzerne County Gas & Electric Company
Metropolitan Edison Company
Northern Pennsylvania Power Company
Penn Central Light & Power Company
Pennsylvania Electric Company
Pennsylvania Power & Light Company
Pennsylvania Power Company

Philadelphia Electric Company
Scranton Electric Company
South Penn Electric Company
Southern Pennsylvania Power Company
Sullivan County Gas & Electric Company
Well-Bo Electric Company
West Penn Power Company



The Young People

How Thanksgiving Became a Legal Holiday

THE first national Thanksgiving proclamation issued and signed by a President of the United States was sent forth by George Washington, on October 3, 1789. From time to time during the Revolution he had declared special days of thanksgiving for "evidences of divine providence," such as the one appointing Thursday, December 18, 1777, a time for general thanksgiving by the Continental Army, and another declaring May 7, 1778, a special day of prayer and thanksgiving for the troops at Valley Forge. The Continental Congress, also, on no less than seven occasions chose various dates for such festivities on account of victories and other encouraging events.

But only once previous to 1789 had the idea of a national Thanksgiving been suggested and discussed, and that was when Samuel Adams, of Massachusetts, moved in the Continental Congress, November 1, 1777, the adoption of a set form for a yearly Thanksgiving proclamation. The motion was adopted and the form presented by Mr. Adams was accepted, but for some unknown reason, probably because of the great troubles and hurried conditions of the period, the matter was entirely overlooked in succeeding years.

The First Proclamation

Then, in August, 1789, that brilliant and original statesman, Alexander Hamilton, arose in a Cabinet meeting and suggested that henceforth the President of the United States should issue annually a proclamation calling upon the nation to devote a certain day to thanking the Creator for the formation and benefits of such a government as ours. The motion was adopted with genuine enthusiasm. President Washington reported the matter most favorably to Congress in September, and in this body also it was adopted by an almost unanimous vote. Some few ultra-conservatives, however, opposed it and made fiery speeches against the idea on the ground that "it savored too much of monarchical institutions." Thus it happened that on October, 1789, Washington issued the first of the Presidential proclamations declaring the last Thursday in November a national day of thanks to God.

Thanks to the Women

Strangely enough, another proclamation was not issued until February 19, 1795, and, still more strangely, the whole matter seems to have been forgotten until 1862, when, on April 10, a declaration was sent forth by Lincoln calling upon the nation to give thanks for the many victories of the Union Army and appointing the next Sunday after the receipt of the proclamation in any community as the legal day for the ceremonies. Again, on July 15, 1863, he appointed, for the same reason, Thursday, August 6; again on October 3, 1863, the last Thursday in November; and once more, on May 9, 1864, a "recommendation" for general Thanksgiving.

Evidently Lincoln knew of the suggestion made by Alexander Hamilton and adopted by Washington's Cabinet and Congress; for on October 26, 1864, he again declared the last Thursday in November a national holiday. By this time a woman had become interested in the matter, and, of course,

that settled it! Sarah Josepha Hale, editor of "Godey's Lady's Book," began a propaganda for having a law fixing the date, and through her really large personal influence and through her magazine she caused so much agitation that in 1864 Congress declared that the last Thursday in November should henceforth be the correct day for national thanksgiving and that the date should be a legal holiday. Since then every President has issued the welcomed proclamation each year.

Carl Holiday.

Things I Wish My Parents Wouldn't Do

Prize Contribution

THEY shouldn't order us to do things, but should ask us nicely, (we do not like it; you wouldn't either). I warrant you we will come back and ask, "Is there anything else I can do for you, Mother?"

They should not criticize. They should, above all, speak appreciatively for things done with particular pains and overlook what we had failed to do.

The Painted Trillium

By GYPSY WILDWOOD

FOR two seasons she had stood alone, her delicate white petals poised on the slim green stem with three small green leaves cuddled close against them. The three tiny leaves made a lovely frame for the waxen white face of the flower. About her waist were three more leaves, broad and lovely and drooping slightly as if to form a billowy green skirt for her. This was the third season and beside her, rising just to her waist, was another plant. Doomed, as are all of this species, to live one year without blooming.

She bowed her lovely head in thought. For one more season she would have to wonder and hope before she could know what her new friend would be. She was the incomparably lovely White Trillium and she hoped, with all her heart, that her friend would be the Painted Trillium. Just above her on the slope stood several lovely white flowers and mingling with them were the deep-hued red of the Painted. What a lovely picture they made. It was the greatest wish of her heart to have, as her companion on the cool green hill, a Painted Trillium.

A Wish Realized

Fall came, and with it sleep for the flowers. The leaves slowly faded and dropped one by one to the ground to make a thick, protecting carpet for the earth and to keep warm the tiny bulb like root of the flowers.

With the first balmy sweet breath of spring the little White Trillium began pushing her closely folded leaves upward, toward warmth and light. She waited in a sweet state of excitement for the time when she might open her lovely white petals. She was more anxious than ever this season for, even in her sleep, dreams of her little friend filled her mind.

Slowly the soft white petals opened. Larger, more lovely than ever she

Often, our parents speak with unwonted praise of what the neighbor's children are accomplishing, ending up with an upheaval of all our weak points and, mind you, they weed these out with meticulous care. It seems when they are through exploiting our bad points (many, aye many), that we are doomed to the lowest possible existence, we cannot get along in this world!

Is it a wonder that, acquiring our wings, we flit the nest and go to dwell amid strangers? It isn't all the children's fault when they leave the farm. There is some one else to blame who would squirm uneasily if an accusing finger was pointed at him.

Parents, being older, show us they are in authority by ruling with an iron rod. You think when Johnnie runs to get the wood (you roared the order at him, many times accompanied by a threat), that he is afraid of you since he is obedient. But, having extorted obedience did you cultivate his respect? Be careful that having achieved obedience, you do not lose respect of your children.

Are you good examples to us? When son whacks his finger with a hammer, and you happen to hear his naughty exclamation, promptly rendering punishment, did you consider first? Yet, when the cow kicks, and in son's, presence, you use unrefined language, is that an example? M. K. Age 15.

Thanksgiving

By FRANCES CROSBY HAMLET

Thanksgiving time is getting near.
And grandma says I ought
To count my blessings; and that
means

Be glad of what I've got.

I'm glad of home, and pa and ma;
I'm glad my hair won't curl;
But most of all, I tell you what—
I'm glad I'm not a girl!

They never have a bit of fun
Indoors, with girly things.
They can't swim in the swimming
hole!

Or climb wild grape-vine swings.
This year I nearly broke my neck
Just diving in the creek;
Got fifty-seven hornet stings
Down in our swamp last week.

Fell off the mow in haying time;
Ran chased me up a tree;
'Only the good die young, it seems,'
My pa he says to me!

Things might have been a whole
lot worse
(I'm thankful as I ought.)
I might have been a girl, with curls;
Gee—I'm glad I'm not!

was. She looked down at her little friend. It was rising almost as high as she but the three tiny leaves still hid its face. For days she watched but the leaves seemed loth to open and reveal their lovely secret. Then, at last, they gently parted. The White Trillium bent nearer. The soft green leaves opened and drooped slightly as the dark velvety petals unfolded. The White Trillium swayed back on her slender stem. Her dearest wish was realized. Her friend was indeed a Painted Trillium. Its petals were deep and rich, darker even than the ones which mingled so freely with the lovely flowers on the higher slope.

And there you may see them yet, their green stems crossed as if in embrace.

Doris Brown.

Little Folks

Timmy Twitcher's Summer Home

By RUTH PLUMLY THOMPSON

(Continued from last week.)

"Goodbye!" called Timmy Twitcher, bowing to left and right as his neighbors and friends peered curiously from their windows and doors. "Goodbye, all!" Dodging and bowing Timmy walked briskly along till he came to the window ledge. By this time all the mice in the village were trailing inquisitively behind.

Mounting the book steps that led up to the window ledge, Timmy turned and waved cheerfully. The attic window had been left open by the two legs who owned the house and as the villagers fairly gasped with astonishment, Timmy stepped boldly through a hole in the screen and balancing himself fearlessly on the narrow sill outside, lifted his cane.

Almost immediately there was a whirr and flutter and down swooped a giant mouse airplane. At least it was a plane to the villagers. You and I would have called it a pigeon. Climbing quite calmly on the pigeon's back, Timmy motioned to the porter who had followed him through the hole in the screen, to hand up his bed and chair. These he tied with a piece of string around the pigeon's neck, then, settling himself comfortably between its wings, tipped his high hat—and flew away, leaving the attic mice with their eyes sticking out and their noses glued to the window screen.

The Bravest Mouse in the Attic

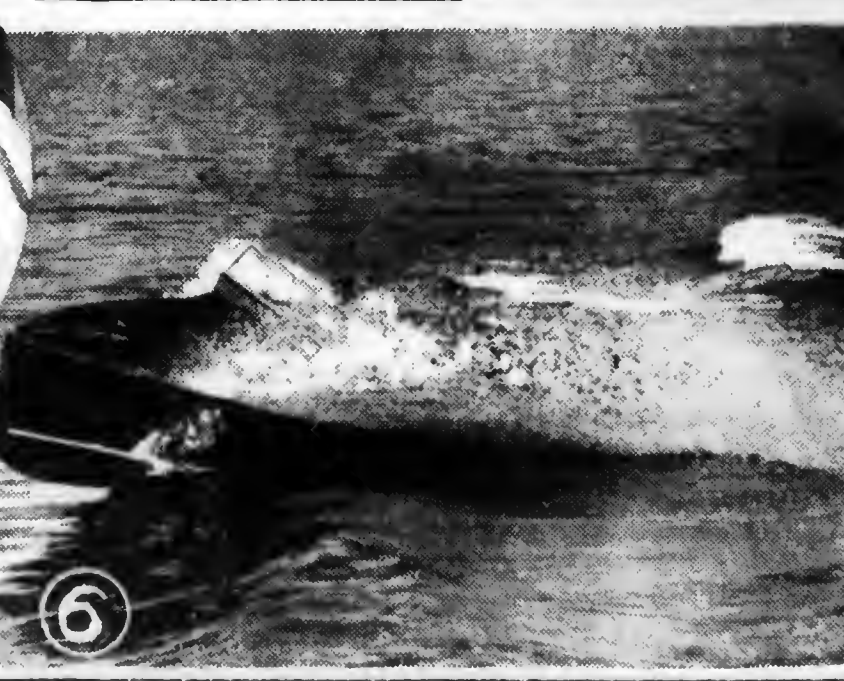
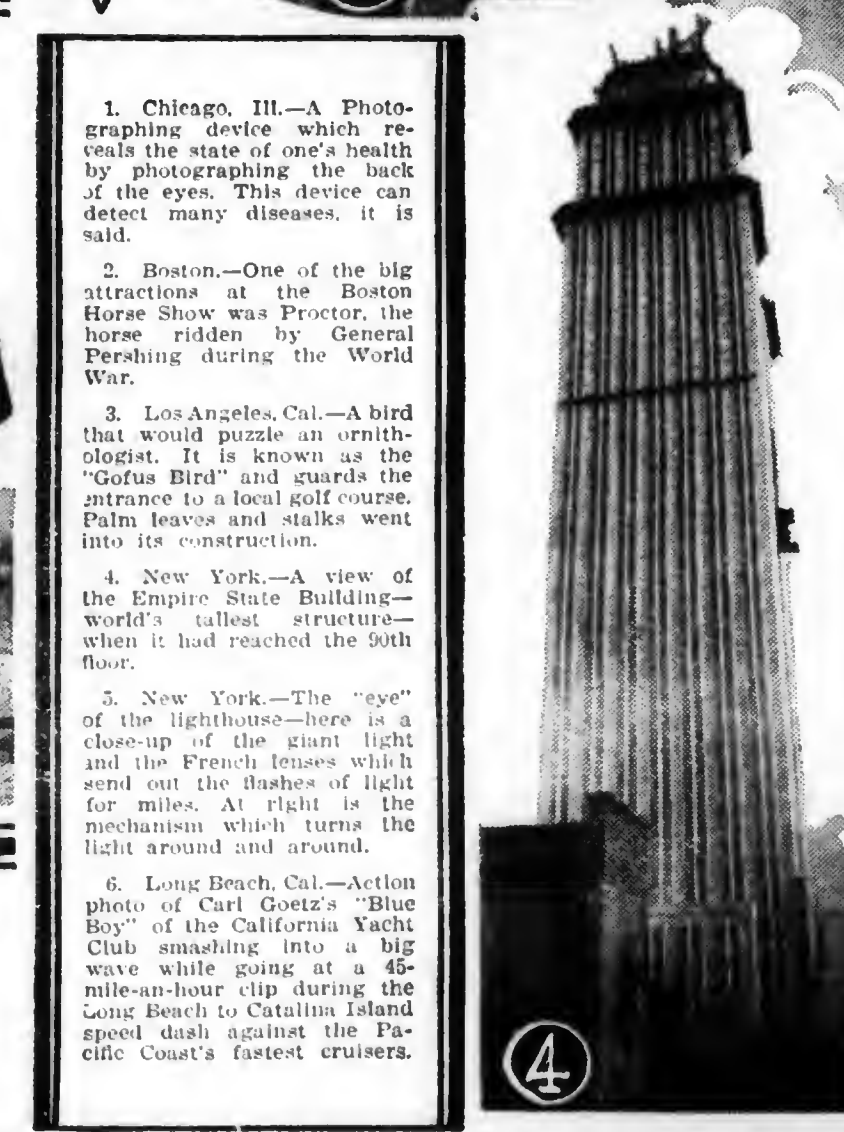
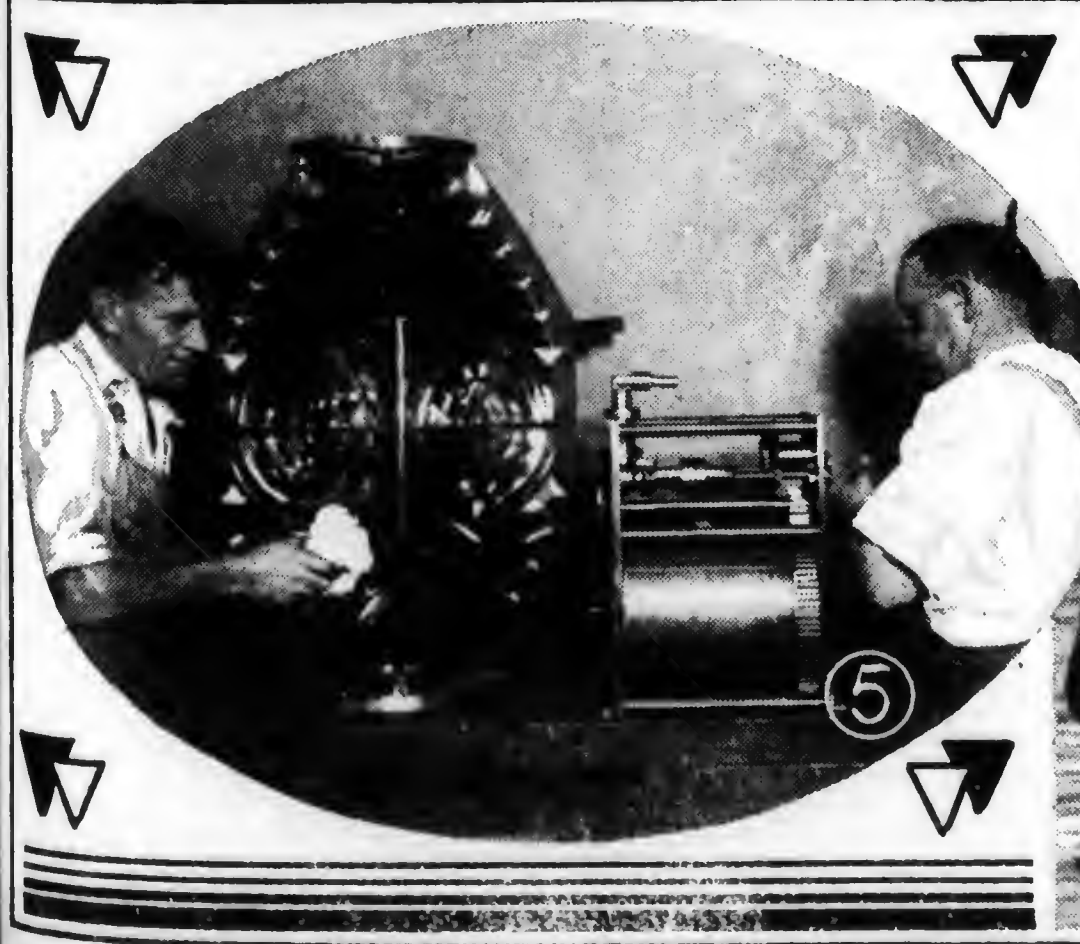
And not until late that evening did they learn of Timmy's destination. The news was brought by a sparrow who lived under the eaves and who often chatted with the mice when the window was open. Timmy, he told them in short breathless twitters, had flown down into the garden and was comfortably established in the old bird house there. It had not been occupied for some time, was cool and commodious, and commanded a superb view of the neighborhood. The cozy little cottage was already taking on an air of comfort and style. Timmy, explained the sparrow, had put up an awning on the porch and arranged with a family of robins and the next tree not only for fruit and fresh vegetables but for taxi service as well.

"Taxi service!" squealed the mice, their noses twitching with interest and surprise.

"Yes, taxi service," chirped the sparrow enjoying the sensation he had caused. "Timmy has agreed to tutor the young robins and in exchange the father robin agrees to carry Timmy up and down from the bird house whenever he wishes to go for a walk or visit."

"What a mouse!" breathed Tiny Wee Bit stroking his mustache wistfully. "What a mouse!" Secretly he longed to visit Timmy's summer home, but nothing would persuade him to mount on the pigeon's back and fly there. Bobby Grey, however, received through the sparrow an invitation to visit Timmy the very next evening and Bobby, being almost as brave and enterprising as Timmy himself, promptly accepted the invitation. For three crusts and a skein of silk the pigeon agreed to transport him to the garden where he spent an exciting and adventurous week in the bird house as Timmy Twitcher's guest. Really, I wish we could have seen them.

PASSING EVENTS IN PICTURES



1. Chicago, Ill.—A photographing device which reveals the state of one's health by photographing the back of the eyes. This device can detect many diseases, it is said.

2. Boston.—One of the big attractions at the Boston Horse Show was Proctor, the horse ridden by General Pershing during the World War.

3. Los Angeles, Cal.—A bird that would puzzle an ornithologist. It is known as the "Gofus Bird" and guards the entrance to a local golf course. Palm leaves and stalks went into its construction.

4. New York.—A view of the Empire State Building—world's tallest structure—when it had reached the 90th floor.

5. New York.—The "eye" of the lighthouse—here is a close-up of the giant light and the French lenses which send out the flashes of light for miles. At right is the mechanism which turns the light around and around.

6. Long Beach, Cal.—Action photo of Carl Goetz's "Blue Boy" of the California Yacht Club smashing into a big wave while going at a 45-mile-an-hour clip during the Long Beach to Catalina Island speed dash against the Pacific Coast's fastest cruisers.

Agricultural Engineering

By R. U. BLASINGAME

Concrete Floors

FROM time to time we have inquiries from our readers with regard to the construction of floors of concrete. The accompanying illustrations show a method of constructing such floors with the use of blocks. These blocks may be of concrete, cinder or clay. The floors in the new Administration Building at State College were built in this fashion.

One will note that the scheme consists of supporting two-by-eight inch plank on bridge work beneath on which the blocks are placed. Reinforcing rods are placed between the layers of blocks and concrete is poured two inches thick over the blocks. This method forms four or six-inch concrete beams between the rows of blocks, depending on the thickness of the blocks, and does not require the usual amount of form work as is necessary for solid concrete floors.

This method is being used for ten and twelve-foot spans for roof construction on potato cellars over which two feet of dirt is placed.

There is no reason why it should not be used for hay mow floors in barns. Somewhat the same system of floor building was recently employed at State College in the construction of a fraternity house. In the vicinity of Philadelphia and other cities many homes are being constructed with solid concrete floors built in this fashion. On top of the concrete is spread a thin layer of hot tar on which are placed squares of cork for flooring.

Concrete mow floors in barns would have the livestock beneath in case of fire. This type of floor, of course, should be used only in connection with masonry walls up to the mow floor.

This type of floor is comparatively cheap, builds up very rapidly, and is not as heavy as the usual run of concrete.

For Stone Removal

A WEEK or so ago I saw a crawler type tractor and subsoiler being used at a lime-stone quarry in Centre county for loosening the soil for a stripping job. It was astonishing how the tractor was able to pull the subsoiler through the stones and hard ground. It left in its wake stones weighing up to half a ton or more.

It naturally occurred to me that such an outfit would be a rapid, economical means of pulling stones from a field. Where ledges were encountered a small piece of dynamite served to crack the rock enough so that the subsoiler pulled it readily.

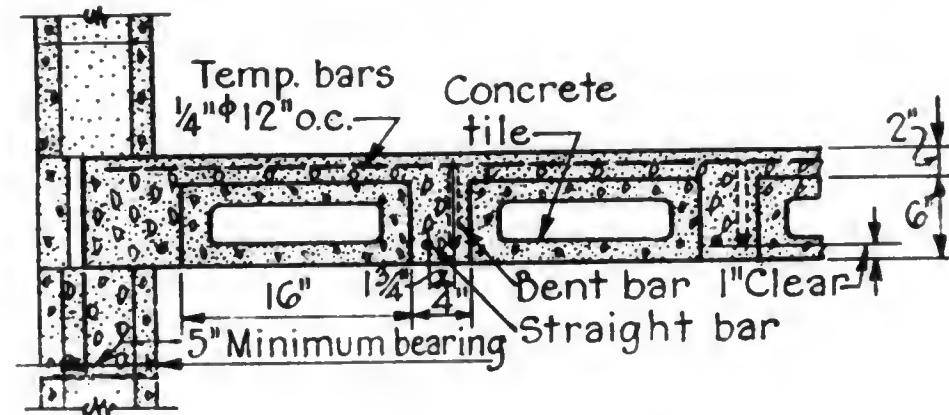
Land reclamation has for years attracted the attention of this country in a big way, but it has related to drainage, irrigation and flood control. No one has given much attention to

devising a method of easily and economically removing large, tight stones from cultivated lands which interfere with cultural methods and cause so much breakage of machinery. Now that we have such agricultural tools as the tractor and the subsoiler, which are strong enough to stand the strain, I feel that we are on the way to a new type of land reclamation which is just as important as drainage or irrigation—that of stone removal from the upper ten to fourteen inches of cultivated land.

Tank Water Heaters

WE know that the heat required to bring water to body temperature of an animal must come from the feed consumed by hog, cow, sheep, etc. Several of our readers have asked about water heaters recently. We shall be pleased to give any of our subscribers a list of the manufacturers of heaters on request.

The following excerpt from the October 15th issue of N. A. F. E. M.



Farm Practice

By W. D. ZINN

Brief Answers

E. M. "I have a run-down meadow which I want to improve. Can I do it without plowing?"

Almost half the meadows in the country may be said to be run down. The thing that surprises me is that so many farmers are willing to mow these meadows year after year and get half as much hay off them as it is possible to cut if proper treatment was given the meadows. I will answer the above question in the affirmative and many of my readers could testify that I am right, for they have improved their meadows without plowing them. Is it not better to have one acre yielding three tons of hay than to have three acres producing the three tons?

Why has this meadow run out? It possibly has not been plowed for twenty years and plant food has been removed from it every year in the

Research Department shows the value of water heaters for dairy cows: "Will Klatz, a member of the Chickasaw, Iowa, Cow-Testing Association, proved the value of warm water. He paid \$25 for a heater and the following month his cows made an average gain of 5.6 pounds of butterfat each. Value of increased production was \$28.34. The equipment paid for itself in one month and had sufficient margin of profit to pay for a winter's supply of coal."

Size of Pipe Line

Please advise me as to the size of a water line pipe I want to put in to get the greatest pressure. I have about forty feet fall from spring to house and want to put a tap at the barn that has about half as much fall as there is to the house. Should there be an air outlet and where? There are 400 feet of water line to be laid. H. C. Elcher, Somerset county, Pa.

A one and one-fourth inch pipe from the spring to the barn and a one-inch pipe from the barn to the house, I think, will give you good pressure with the forty-foot fall over a distance of 400 feet. At the farm and also at the house you could use three-quarter inch distributing pipe. R. U. E.

L. J. S.—Chestnut and (rest of text) speaking; but I have seen land having this kind of timber that was very productive. Walnut, sugar or maple trees and poplar are signs of a fertile soil, and yet I have seen exceptions to this rule.

L. W. J.—You ask me to give you a mental of an education. I would begin with reading and spelling—the subjects that are sadly neglected in our public schools of today. It is reading that we broaden our mind. If we are poor readers we are unable to grasp the thought of the author and therefore our reading does not benefit us very much. There is vast difference between calling words and reading understandingly. To poor speller is not considered by those who have a clerical job to offer. There are many other things that are essential to one's success in life, but seems to me that the two above mentioned are the most essential.

T. W. C.—I go on the theory that most men are honest and want to be fair with their employees. They have been with that firm five years and they have neither given nor increase in your salary nor promotion then I am led to believe the fault lies at your door. Is it a fact that some of your fellow lackers have had their wages increased and some have been given better positions? How many times during the past five years have you worked overtime and made no charge for it because you saw the best interests of your employers demanded it? You should always bear in mind that you are the architect of your own fortune.

E. D. H.—There are 313 good days in a year for applying lime. The other 52 days are Sundays and that would be a bad time to apply lime. Years ago we said apply it on the plowed ground. Now we say put it on the sod if it suits you better and plow it down. Some stations, however, cling to the plowed ground theory, but the Ohio Station says it makes but little difference where you put it.

J. W. C.—"I have some very good hay and some not so good. Should I feed the poor hay first or keep it toward the close of the feeding period?"

Some time ago I said the fat on the back of the animal in the fall served as a blanket to keep it warm. Would not the feeding of the poor hay exclusively in the early fall and winter cause the animal to remove this blanket?

If you feed all the good hay now and begin on the poor hay in mid-

winter it will be too much of a change and the animal will lose rapidly. I did this and had fed no grain up to this time I would feed some grain along with the poor hay. Perhaps a better way to do, if you cannot afford to feed any grain, is to give your cattle one feed of good hay and the next feed of poor hay, but I would prefer the grain ration to that.

E. J. J.—No, superphosphate will not sour the land. On the contrary it has a tendency to make land sweeter. Get it out of your head that if you once begin to use fertilizer you will have to keep it up if you grow profitable crops at all. The truth is if you once begin to apply fertilizer you will want to keep it up because you will find you are getting good results.

H. G. M.—It is now too late to sow vetch and wheat or even rye and sow the field to oats and cut the oats for hay when they are in the milk stage. I saw a field of oats in summer that had been cut for hay and the oats shattered so much that they made a good stand of oats when they came up. The mice and rats will eat these oats this winter and will give the owner a great deal of trouble. Not only are a great deal of the oats lost, but the feeding value of the straw has been reduced very much.

L. J. S.—Chestnut and (rest of text) speaking; but I have seen land having this kind of timber that was very productive. Walnut, sugar or maple trees and poplar are signs of a fertile soil, and yet I have seen exceptions to this rule.

L. W. J.—You ask me to give you a mental of an education. I would begin with reading and spelling—the subjects that are sadly neglected in our public schools of today. It is reading that we broaden our mind. If we are poor readers we are unable to grasp the thought of the author and therefore our reading does not benefit us very much. There is vast difference between calling words and reading understandingly. To poor speller is not considered by those who have a clerical job to offer. There are many other things that are essential to one's success in life, but seems to me that the two above mentioned are the most essential.

T. W. C.—I go on the theory that most men are honest and want to be fair with their employees. They have been with that firm five years and they have neither given nor increase in your salary nor promotion then I am led to believe the fault lies at your door. Is it a fact that some of your fellow lackers have had their wages increased and some have been given better positions? How many times during the past five years have you worked overtime and made no charge for it because you saw the best interests of your employers demanded it? You should always bear in mind that you are the architect of your own fortune.

E. D. H.—There are 313 good days in a year for applying lime. The other 52 days are Sundays and that would be a bad time to apply lime. Years ago we said apply it on the plowed ground. Now we say put it on the sod if it suits you better and plow it down. Some stations, however, cling to the plowed ground theory, but the Ohio Station says it makes but little difference where you put it.

J. W. C.—"I have some very good hay and some not so good. Should I feed the poor hay first or keep it toward the close of the feeding period?"

Some time ago I said the fat on the back of the animal in the fall served as a blanket to keep it warm. Would not the feeding of the poor hay exclusively in the early fall and winter cause the animal to remove this blanket?

If you feed all the good hay now and begin on the poor hay in mid-

The MARKET PLACE

By W. R. WHITACRE

A NEW plan for the relief of the unemployed and for the boosting of apple sales is working fairly well in New York City. Men carrying a sign, on which is printed, "Unemployed. Buy an apple—5c each," are selling large red Spitz and Jonathan apples in all business sections.

A New York apple dealer conceived the idea and gained the cooperation of the police department. The boxes of apples are sold to the men who have funds at a low price, while those who do not have funds are trusted. The first day less than ten per cent of those trusted failed to pay and as the week progressed more boxes were given out and the percentage of those who did not pay was less.

Large-sized apples, 100's and larger, were used and these are sizes which are difficult to sell through regular trade channels. The men were able to make a profit of around \$2.25 to \$3 a day, and after weeks of unemployment this was a real help. This plan also gave a wider distribution to apples and helped advertise National Apple Week. About 500 men were employed and many of them plan to continue in this work until employment conditions pick up. It may be that a similar plan can be worked out in smaller cities.

I READ in a newspaper of a political candidate in a nearby state who was distributing apples to voters in place of the customary campaign figures. He believes that folks would rather have a good apple than a bun. I do not know whether he was elected, but if he was the scheme might help future candidates and the apple growers as well.

THE roadside stand as an outlet for farm produce is doomed unless the operators get over the mistaken notion that the consumer will pay big money for the privilege of buying poor stuff at the farm. For example, I can buy well-colored Stay-green apples on the wholesale market at \$1.50 per bushel and I can get fair stock for \$1 to \$1.25. The farmer gets this price minus ten per cent commission and his transportation costs. In other words, \$1.30 would be a fair price on the farm for the best stock if it was bringing \$1.50 in the city.

Why then should roadside farm markets ask 75c to 85c a half bushel for apples that are poorly graded and lack both color and quality? I have many friends, who formerly made a practice of buying produce at the farm when they motored through the country, who tell me that they are going to buy in the city since they can get better goods for less money in their neighborhood store. Undoubtedly there are roadside stands that offer good produce at a fair price, but this other class of stand is a detriment.

Second Crop of Asparagus

NOTICED in the October 4th issue of Pennsylvania Farmer where some one desired to know if it would spoil the crop of asparagus for next year by cutting the second growth. Second growth of asparagus will often put up when the bed is cleared off and burnt in late summer as was the above case.

I find no ill-effect will result by cutting the fall crop of asparagus, as it will be just as good next spring and put up just as early. Of course in cold climates the bed should be covered in late fall with some kind of manure; stable manure is my preference. Yes! The second crop should be kept cut down until cold weather comes. W. H. H.

Out Goes the Manure from the barn to the field—in a jiffy



McCormick-Deering FEATURES

Eight Roller Bearings
New, Non-Wrapping Saw-tooth Beater
Improved Spiral
Low, Easy-to-load, Reinforced Box
Convenient levers
Oscillating Front Axle
Six Conveyor Speeds

MANURE LEACHING in piles or in a pit waiting to be spread doesn't help much to boost land values and crop yields. To get full benefit it should be SPREAD PROMPTLY and EVENLY.

The McCormick-Deering Manure Spreader is the machine that makes the job SIMPLE and SPEEDY. Built with a low, steel-braced box, it loads quickly. Roller bearings make it light draft. Six conveyor speeds give you close control of the spread. And the improved type beaters and the wide-spreading spiral maintain an even spread of finely pulverized and shredded manure right down to the last forkful.

Take the time to examine the McCormick-Deering Manure Spreader on the McCormick-Deering dealer's floor. Find out how well this spreader is built and how profitably it will serve you.

INTERNATIONAL HARVESTER COMPANY
606 So. Michigan Ave. of America Chicago, Illinois
(Incorporated)
Branches at Pittsburgh, Harrisburg, Philadelphia, Pa.
and at 95 other points in the United States.

McCormick-Deering Manure Spreaders

Use McCormick-Deering Machines to Lower Your Production Costs

Empire Oil-Burning Tank Heater



Greatest improvement ever made in tank heaters. Pipe and tank, 14 to 16 hours on operation of kerosene. No sparks, soot or smoke. Heating chamber entirely under water, no heat wasted. Guaranteed. Saves fuel, as a tank heater. Heavy galvanized iron, 20 gal. capacity. Oil burner directly under tank, guaranteed not to freeze. Keeps water warm at a small cost. Keeps boiler healthy, faster, faster on the same fuel.

EMPIRE TANK HEATER CO., 130 N. 7th St., Washington, D. C.

"Peerless" Fodder Shredder

If you have 3 H. P. engine you can run this 14-inch machine successfully. Will pay for itself in one year's use. Will not pulverize blades and tops.

Write for price and catalog
A. M. Bellinger, 773 N. Prince St., Lancaster, Pa.

RAW FURS



More PROFITS from your FURS

Make your fur season more profitable this year by shipping to Traugott Schmidt & Sons, a company with a 78-year record of fair dealing in the fur trade. No sliding scale of prices, but exact quotations based on liberal gradings. And we pay the price we quote! Write for fur price list and special offer to shippers.

TRAUGOTT SCHMIDT & SONS
504 Monroe Ave., Detroit, Mich.

GIBBS TRAPS ARE BEST

This holds what they CATCH, and add to your list of traps. They Pay You to Use Them. You Pay 1.00. Send for our NEW Catalog. FREE. HENRIE, 1011 Third St., New York.

Dept. N-43, CHESTER, PA.

TRAPPERS Get this! I PAY 5% MORE



If you didn't ship me your furs last season you LOST MONEY even if you received full market value for every skin. You lost the 5% EXTRA I pay on all shipments of \$50 and up. ABOVE FULL MARKET PRICES. I can afford to pay a bonus for furs because I'm the largest receiver of raw furs in the East. I can use all the skins you catch. Send me your furs this season and get that extra 5%. And remember this, I pay the day your shipment is received. I pay every penny—there are no deductions for commission, handling, transportation. Clip coupon for my authentic price list, shipping tags, trappers' hand book. All FREE.

MR. GEORGE I. FOX, (Personal)
236 W. 30th St., New York
Send me FREE items mentioned above. I want to make more fur money this year.

Name.....
Address.....

LET US TAN YOUR HIDE

FUR DRESSERS and TAXIDERMISTS
SEND FOR CATALOG
The Crosby Frisian Fur Company
564 Lyell Avenue Rochester, N. Y.

When writing advertisers please mention Pennsylvania Farmer

Farmer's Business Letter

BASED on good husking returns corn yield has been edged up to 2,094,000,000 bushels, a gain of 47,000,000 over the October report. Not only is the crop over 500,000,000 bushels under last year, but it is now estimated that the total of old corn left on farms is down to 72,000,000 bushels, which compares with a five-year average of 102,000,000 bushels.

The Canadian wheat crop is now estimated at 335,800,000 bushels, a gain of 11,000,000 bushels over the last report. This is more than 90,000,000 bushels above last year's crop. World wheat situation is still regarded as bearish. European production was under last year, and stocks are lighter, but more wheat was produced in North America, India, Australia and probably in the Argentine. Further, while the size of the Russian crop is unknown, that country has entered the export field. Various influences have held our wheat above export basis, and there has been little foreign trade for some time. Nor is there thought to be much prospect in that line. Feeding of wheat and the probability that price and other conditions will favor increased consumption of wheat in this country are about the only favorable factors evident at this time, and they are for the long pull rather than the immediate future.

Heavy Steers Much Lower

Weighty steers took a big slump this week, the decline amounting to \$14.150; yearlings were off 25 to 50 cents, and all other bovine stock was about as much lower except calves which held steady. Receipts at the leading points were larger than last week, and the trade is cautious, partly on account of the approach of the poultry season and the low prices at which everything in that line is selling. While top yearlings sold at \$13.75, the same as last week, top heavies brought only \$12.50, 85 cents under last week, and the steer average dropped to \$10.25, lowest since the week of August 23 and lowest for any corresponding week since 1926. For the first ten months of the year federal inspected slaughter of cattle totaled 6,873,768, against 6,934,594 during the same period last year.

The improved demand for and the increased shipments of stocker and feeder cattle in October, according to a government report, were due to the declining prices of corn and other feedstuffs, to the somewhat improved prospects for corn production, to the relatively wide spread between feeder and fat cattle prices and the generally favorable weather during October.

Hog Position Strong

With larger receipts the hog market has weakened. The Chicago run this week totaled 207,000, largest for any week since February 15. Eleven markets had 566,000, 43,000 more than last week but 70,000 under a year ago. The eleven market run this week was lightest for the week in more than 15 years. Average price of hogs dropped to \$8.75, lowest in nearly two years.

Weakness in the hog market is attributable more to general conditions than to any weakness in the statistical situation. Slaughtering is light. During the month of October 3,491,590 hogs were slaughtered under federal inspection in the United States compared with 3,857,147 a year ago; and for the ten months of the year the total is 35,595,374 against 38,863,115 a year ago.

The position with regard to storage stocks is equally strong. At the end of October had dropped to a low of 36 million pounds, smallest on record with a few exceptions, and comparing with 73 million pounds, the November 1 average of the past five years. The total of pork in store on November 1 was 354 million pounds, which compares with a five-year average of 436 million.

The hog futures market closed in about the same notch as last week. Light weights sold at \$8.75 for December delivery, and at \$8.60 for January; medium weights sold up to \$8.90 for January and March delivery, and heavies at \$8.80 for January. Trading was again very light, reflecting to some extent the lack of speculation in markets in general. Hog futures trading will have to pick up before the market can be said to have much significance or value.

Decline in Lambs

While early this week best lambs were bringing \$8.85, at the close \$8 was the top and large droves of choice

lambs went to packers at \$7.50-7.75, with \$7.75 taking the bulk. Receipts at the leading points showed some increase, but the chief difficulty was glutted dressed markets. Nobody wanted lambs except at sacrifice prices. Available information points to a material decrease in the total number of lambs which will remain on feed for market in all areas on January 1, 1931, in comparison with the number on feed on January 1, 1930, says a government report. This decrease may exceed 500,000 head. The number of fed lambs available to move during November and December, however, appears to be much larger than the number marketed during those months in 1929.

Slaughter of sheep and lambs under federal inspection during October totaled 1,727,179, the largest for the month on record, and comparing with 1,365,325 a year ago. For the ten months of the year the total is 13,964,672, against 11,773,223 in 1929.

Government in Business

An organization has been formed the purpose of which is to drive the government out of business and keep it out. It is called the National Association Against Government in Private Business. Prominent in it is a member of the legal profession who may or may not be primarily interested in carrying the Agricultural Marketing Act to the Supreme Court on a fee basis. None the less it is a movement that is likely to gain momentum, for it is a fact that business men are beginning to be concerned about the possible ramifications of this act.

Champion Lamb Grower

The champion lamb grower of Wisconsin, Joseph Meir, produced an average 139.8 pounds of lamb per ewe in 120 days. He saved 30 lambs from his 16 ewes, which averaged 75.4 pounds apiece at 120 days.

Chicago, Nov. 15, 1930 Watson

Produce Market Review

THE Philadelphia egg market was firm on fresh eggs of good quality with prices advancing. Receipts were smaller and according to many dealers were the lightest in years. Selected whites sold readily and browns met a satisfactory demand. Nearby mixed colors were scarce at all times during the week. Receipts of western fresh eggs were limited but were ample for the demand and prices held firm. Reports from shipping points indicate that receipts will be light since large quantities are being consumed locally and only small lots are available for shipment.

Refrigerator sterilized Pacific Coast white eggs, which are the nearest substitute to fresh stock, moved fairly well at comparatively low prices and within a range of 32-35c. Supplies were liberal.

Other refrigerator stock was fairly steady but the demand was confined mostly to small lots, as practically all buyers have storage stocks of their own. The future market in Chicago declined to a very low level during the week without affecting spot sales.

The majority of sales of fresh eggs moving mostly in small jobbing lots were reported by the Bureau of Agricultural Economics within the following price ranges: Fancy selected near-by whites 55-58c, henneries 62c, browns 46-50c, mixed colors 40-42c, fancy western browns 46-50c, whites 48-52c, mixed colors 42-45c.

The egg market in New York was firm during the entire week and prices advanced on practically all grades. Nearby henneries white eggs sold at 27-28c per dozen, browns at 40-45c and mixed colors at 20-25c.

Fancy Poultry Steady

The live poultry market in New York was steady for fancy stock and but a few undergrades. Receipts were moderate to liberal and the quality of most receipts was average. Buyers were looking for fancy grades but the lower grades were difficult to move. Leghorn fowl brought 15-22c per pound, colored fowl 20-24c, with fancy lots as high as 26c. Leghorn chickens brought 17-20c, Rhode Island Reds 18-20c and Rocks 20-22c.

The dressed poultry market was steady with moderate receipts of fresh stock. Broilers brought 25-34c, chickens 24-30c and fowls 20-28c. Nearby turkeys sold at 34-40c.

Butter prices dropped sharply dur-

ing the past week with declines of 3-4c a pound registered at most markets. Trading on all markets was unsatisfactory with buyers very cautious and confining their purchases to their most urgent needs. Receipts were no larger than the week before but there was a larger proportion of the top grades.

The storage report for the entire country of 109,582,000 pounds, as compared with 138,405,000 on November first a year ago, was not as large a shortage as the trade expected. Dealers had anticipated a larger reduction of storage stocks.

Potatoes Weaker

The potato markets were weaker and prices tended lower in all eastern cities. Supplies were liberal and the demand slow. Most sales of Pennsylvania stock were at a level of \$1.50-1.75 per 100-pound sack, although a few lots of fancy stock brought \$2 in Philadelphia. New York state potatoes sold at practically the same level. Prices at Maine shipping points have dropped to \$1 per hundredweight for bulk stock. Growers are holding and refuse to sell below this point.

The November crop estimate report did not help the situation, since it increased the estimated production. Even with this increase the crop is a light one and runs about three bushels per capita of population. Prices are far below those of other years when production was even higher than at present. The shortage of potatoes is greatest in the central region of the country and in several of the middle Atlantic states. The average quality of the crop is the lowest in years, which means that there is a large percentage of small and defective potatoes and that more No. 2's will probably be shipped than in normal years.

The sweet potato market has shown some improvement in the past week and most markets report a better demand. Shippers have decreased and are now averaging about 60 cars a day. About half of the present shipments are from the Eastern Shore of Virginia. New Jersey red and yellow varieties sold at 65-90c per bushel in Philadelphia, or about 5-15c above

prices at the opening of the month. Similar stock brought \$1.17-1.75 per bushel in New York and \$2.35 in Pittsburgh.

The apple markets have not shown much change during the past week. The demand continued slow and supplies were moderate to liberal. New England, New York, New Jersey and Pennsylvania have apple crops that are above average and about 50 per cent of this year's crop in the so-called barreled apple region is in these states.

HAY MARKET REVIEW

Hay markets were somewhat irregular during the week ending November 14. The U. S. Department of Agriculture Market News Service. Offerings were generally light, while demand continued moderate to dull.

New York.—Timothy, No. 1, \$2.50; No. 2, \$2.50.
Pittsburgh.—Timothy, No. 1, \$2.40; Clover, No. 1, \$2.7.
Chicago.—Alfalfa, No. 1, \$2.7; Timothy, No. 1, \$2.2; No. 3, \$1.8.

DEATH OF WESLEY BECK

On Saturday, November 15, Wesley Beck of the firm of Brinkman, Wood and Beck, Pittsburgh Stockyards, fell dead as a result of over-exertion. Mr. Beck was one of the veteran commission men at the yards, also one of the best known buyers of cattle and hogs. He was a native of northern West Virginia and was sixty-six years of age.

PITTSBURGH MILK PRICES

The Dairyman's Cooperative Milk Company announces the following list prices to dealers as the basis of payments to producers for 3.5 per cent milk delivered during October.

District 1.—Country plants, 1.50; surplus, 1.77. Direct shipped, 1.50; surplus, \$2.17.
District 2.—F. O. B. basis, 1.40; surplus, \$1.51.
District 3.—F. O. B. basis, 1.20; surplus, \$1.31.
District 4.—F. O. B. basis, 1.20; surplus, \$1.31.
District 5.—F. O. B. basis, 1.20; surplus, \$1.31.
District 6.—F. O. B. basis, 1.20; surplus, \$1.31.
District 7.—F. O. B. basis, 1.20; surplus, \$1.31.
District 8.—F. O. B. basis, 1.20; surplus, \$1.31.
District 9.—F. O. B. basis, 1.20; surplus, \$1.31.
District 10.—F. O. B. basis, 1.20; surplus, \$1.31.
District 11.—F. O. B. basis, 1.20; surplus, \$1.31.
District 12.—F. O. B. basis, 1.20; surplus, \$1.31.

Operative Marketing Conference

Two months ago the executive committee of the National Grange decided to have a public conference during the 1930 session of representatives of various agricultural cooperatives. This was held the second and third days of the session, and was presided in by C. A. Ewing, president of the National Livestock Marketing Association; C. E. Huff, president of Farmers' National Grain Producers' League; Howard Babington, manager of Grange-League-Exchange; Clarence Poe, president of Progressive Farmer and editor of North Carolina State Farm Journal; James Stone and Charles E. of the Federal Farm Board, Secretary of Agriculture Arthur Hyde.

Ewing cited that 80 per cent of corn is marketed through live-stock and that six intermountain states last year marketed \$160,000,000 worth through the National Livestock Marketing Association, although primary aim is to secure orderly distribution without which orderly profitable marketing is impossible. He serves as advisor as well as mediator, and results so far have been very satisfactory to members.

Regarding the Farmers' National Grain Producers' League, Mr. Huff said: "It is the largest grain cooperative organization 27 grain cooperatives disinterestedly over the country, representing 250,000 producers. It is the largest grain concern in the world. It has proved an immediate marketing medium with wide participation."

Referring to the Dairyman's League, Babington emphasized that the basis is better rural homes and communities in the New York milk shed. The league started in 1907, and was organized on its present basis in 1920. It has 250 plants in New York City, and it is managed by 24 districts.

CHICAGO

Chicago, Nov. 17.—The following cash prices were reported by the Chicago Board of Trade: No. 1 yellow corn, 88-90c; No. 2 yellow corn, 86-88c; No. 3 yellow corn, 84-86c; No. 4 yellow corn, 82-84c; No. 5 yellow corn, 80-82c; No. 6 yellow corn, 78-80c; No. 7 yellow corn, 76-78c; No. 8 yellow corn, 74-76c; No. 9 yellow corn, 72-74c; No. 10 yellow corn, 70-72c; No. 11 yellow corn, 68-70c; No. 12 yellow corn, 66-68c; No. 13 yellow corn, 64-66c; No. 14 yellow corn, 62-64c; No. 15 yellow corn, 60-62c; No. 16 yellow corn, 58-60c; No. 17 yellow corn, 56-58c; No. 18 yellow corn, 54-56c; No. 19 yellow corn, 52-54c; No. 20 yellow corn, 50-52c; No. 21 yellow corn, 48-50c; No. 22 yellow corn, 46-48c; No. 23 yellow corn, 44-46c; No. 24 yellow corn, 42-44c; No. 25 yellow corn, 40-42c; No. 26 yellow corn, 38-40c; No. 27 yellow corn, 36-38c; No. 28 yellow corn, 34-36c; No. 29 yellow corn, 32-34c; No. 30 yellow corn, 30-32c; No. 31 yellow corn, 28-30c; No. 32 yellow corn, 26-28c; No. 33 yellow corn, 24-26c; No. 34 yellow corn, 22-24c; No. 35 yellow corn, 20-22c; No. 36 yellow corn, 18-20c; No. 37 yellow corn, 16-18c; No. 38 yellow corn, 14-16c; No. 39 yellow corn, 12-14c; No. 40 yellow corn, 10-12c; No. 41 yellow corn, 8-10c; No. 42 yellow corn, 6-8c; No. 43 yellow corn, 4-6c; No. 44 yellow corn, 2-4c; No. 45 yellow corn, 0-2c; No. 46 yellow corn, 0-1c; No. 47 yellow corn, 0-0.5c; No. 48 yellow corn, 0-0.2c; No. 49 yellow corn, 0-0.1c; No. 50 yellow corn, 0-0.05c; No. 51 yellow corn, 0-0.02c; No. 52 yellow corn, 0-0.01c; No. 53 yellow corn, 0-0.005c; No. 54 yellow corn, 0-0.002c; No. 55 yellow corn, 0-0.001c; No. 56 yellow corn, 0-0.0005c; No. 57 yellow corn, 0-0.0002c; No. 58 yellow corn, 0-0.0001c; No. 59 yellow corn, 0-0.00005c; No. 60 yellow corn, 0-0.00002c; No. 61 yellow corn, 0-0.00001c; No. 62 yellow corn, 0-0.000005c; No. 63 yellow corn, 0-0.000002c; No. 64 yellow corn, 0-0.000001c; No. 65 yellow corn, 0-0.0000005c; No. 66 yellow corn, 0-0.0000002c; No. 67 yellow corn, 0-0.0000001c; No. 68 yellow corn, 0-0.00000005c; No. 69 yellow corn, 0-0.00000002c; No. 70 yellow corn, 0-0.00000001c; No. 71 yellow corn, 0-0.000000005c; No. 72 yellow corn, 0-0.000000002c; No. 73 yellow corn, 0-0.000000001c; No. 74 yellow corn, 0-0.0000000005c; No. 75 yellow corn, 0-0.0000000002c; No. 76 yellow corn, 0-0.0000000001c; No. 77 yellow corn, 0-0.00000000005c; No. 78 yellow corn, 0-0.00000000002c; No. 79 yellow corn, 0-0.00000000001c; No. 80 yellow corn, 0-0.000000000005c; No. 81 yellow corn, 0-0.000000000002c; No. 82 yellow corn, 0-0.000000000001c; No. 83 yellow corn, 0-0.0000000000005c; No. 84 yellow corn, 0-0.0000000000002c; No. 85 yellow corn, 0-0.0000000000001c; No. 86 yellow corn, 0-0.00000000000005c; No. 87 yellow corn, 0-0.00000000000002c; No. 88 yellow corn, 0-0.00000000000001c; No. 89 yellow corn, 0-0.000000000000005c; No. 90 yellow corn, 0-0.000000000000002c; No. 91 yellow corn, 0-0.000000000000001c; No. 92 yellow corn, 0-0.0000000000000005c; No. 93 yellow corn, 0-0.0000000000000002c; No. 94 yellow corn, 0-0.0000000000000001c; No. 95 yellow corn, 0-0.00000000000000005c; No. 96 yellow corn, 0-0.00000000000000002c; No. 97 yellow corn, 0-0.00000000000000001c; No. 98 yellow corn, 0-0.000000000000000005c; No. 99 yellow corn, 0-0.000000000000000002c; No. 100 yellow corn, 0-0.000000000000000001c.

Chicago, Nov. 17.—The following cash prices were reported by the Chicago Board of Trade: No. 1 yellow corn, 88-90c; No. 2 yellow corn, 86-88c; No. 3 yellow corn, 84-86c; No. 4 yellow corn, 82-84c; No. 5 yellow corn, 80-82c; No. 6 yellow corn, 78-80c; No. 7 yellow corn, 76-78c; No. 8 yellow corn, 74-76c; No. 9 yellow corn, 72-74c; No. 10 yellow corn, 70-72c; No. 11 yellow corn, 68-70c; No. 12 yellow corn, 66-68c; No. 13 yellow corn, 64-66c; No. 14 yellow corn, 62-64c; No. 15 yellow corn, 60-62c; No. 16 yellow corn, 58-60c; No. 17 yellow corn, 56-58c; No. 18 yellow corn, 54-56c; No. 19 yellow corn, 52-54c; No. 20 yellow corn, 50-52c; No. 21 yellow corn, 48-50c; No. 22 yellow corn, 46-48c; No. 23 yellow corn, 44-46c; No. 24 yellow corn, 42-44c; No. 25 yellow corn, 40-42c; No. 26 yellow corn, 38-40c; No. 27 yellow corn, 36-38c; No. 28 yellow corn, 34-36c; No. 29 yellow corn, 32-34c; No. 30 yellow corn, 30-32c; No. 31 yellow corn, 28-30c; No. 32 yellow corn, 26-28c; No. 33 yellow corn, 24-26c; No. 34 yellow corn, 22-24c; No. 35 yellow corn, 20-22c; No. 36 yellow corn, 18-20c; No. 37 yellow corn, 16-18c; No. 38 yellow corn, 14-16c; No. 39 yellow corn, 12-14c; No. 40 yellow corn, 10-12c; No. 41 yellow corn, 8-10c; No. 42 yellow corn, 6-8c; No. 43 yellow corn, 4-6c; No. 44 yellow corn, 2-4c; No. 45 yellow corn, 0-2c; No. 46 yellow corn, 0-1c; No. 47 yellow corn, 0-0.5c; No. 48 yellow corn, 0-0.2c; No. 49 yellow corn, 0-0.1c; No. 50 yellow corn, 0-0.05c; No. 51 yellow corn, 0-0.02c; No. 52 yellow corn, 0-0.01c; No. 53 yellow corn, 0-0.005c; No. 54 yellow corn, 0-0.002c; No. 55 yellow corn, 0-0.001c; No. 56 yellow corn, 0-0.0005c; No. 57 yellow corn, 0-0.0002c; No. 58 yellow corn, 0-0.0001c; No. 59 yellow corn, 0-0.00005c; No. 60 yellow corn, 0-0.00002c; No. 61 yellow corn, 0-0.00001c; No. 62 yellow corn, 0-0.000005c; No. 63 yellow corn, 0-0.000002c; No. 64 yellow corn, 0-0.000001c; No. 65 yellow corn, 0-0.0000005c; No. 66 yellow corn, 0-0.0000002c; No. 67 yellow corn, 0-0.0000001c; No. 68 yellow corn, 0-0.00000005c; No. 69 yellow corn, 0-0.00000002c; No. 70 yellow corn, 0-0.00000001c; No. 71 yellow corn, 0-0.000000005c; No. 72 yellow corn, 0-0.000000002c; No. 73 yellow corn, 0-0.000000001c; No. 74 yellow corn, 0-0.0000000005c; No. 75 yellow corn, 0-0.0000000002c; No. 76 yellow corn, 0-0.0000000001c; No. 77 yellow corn, 0-0.00000000005c; No. 78 yellow corn, 0-0.00000000002c; No. 79 yellow corn, 0-0.00000000001c; No. 80 yellow corn, 0-0.000000000005c; No. 81 yellow corn, 0-0.000000000002c; No. 82 yellow corn, 0-0.000000000001c; No. 83 yellow corn, 0-0.0000000000005c; No. 84 yellow corn, 0-0.0000000000002c; No. 85 yellow corn, 0-0.0000000000001c; No. 86 yellow corn, 0-0.00000000000005c; No. 87 yellow corn, 0-0.00000000000002c; No. 88 yellow corn, 0-0.00000000000001c; No. 89 yellow corn, 0-0.000000000000005c; No. 90 yellow corn, 0-0.000000000000002c; No. 91 yellow corn, 0-0.000000000000001c; No. 92 yellow corn, 0-0.0000000000000005c; No. 93 yellow corn, 0-0.0000000000000002c; No. 94 yellow corn, 0-0.0000000000000001c; No. 95 yellow corn, 0-0.00000000000000005c; No. 96 yellow corn, 0-0.00000000000000002c; No. 97 yellow corn, 0-0.00000000000000001c; No. 98 yellow corn, 0-0.000000000000000005c; No. 99 yellow corn, 0-0.000000000000000002c; No. 100 yellow corn, 0-0.000000000000000001c.

Chicago, Nov. 17.—The following cash prices were reported by the Chicago Board of Trade: No. 1 yellow corn, 88-90c; No. 2 yellow corn, 86-88c; No. 3 yellow corn, 84-86c; No. 4 yellow corn, 82-84c; No. 5 yellow corn, 80-82c; No. 6 yellow corn, 78-80c; No. 7 yellow corn, 76-78c; No. 8 yellow corn, 74-76c; No. 9 yellow corn, 72-74c; No. 10 yellow corn, 70-72c; No. 11 yellow corn, 68-70c; No. 12 yellow corn, 66-68c; No. 13 yellow corn, 64-66c; No. 14 yellow corn, 62-64c; No. 15 yellow corn, 60-62c; No. 16 yellow corn, 58-60c; No. 17 yellow corn, 56-58c; No. 18 yellow corn, 54-56c; No. 19 yellow corn, 52-54c; No. 20 yellow corn, 50-52c; No. 21 yellow corn, 48-50c; No. 22 yellow corn, 46-48c; No. 23 yellow corn, 44-46c; No. 24 yellow corn, 42-44c; No. 25 yellow corn, 40-42c; No. 26 yellow corn, 38-40c; No. 27 yellow corn, 36-38c; No. 28 yellow corn, 34-36c; No. 29 yellow corn, 32-34c; No. 30 yellow corn, 30-32c; No. 31 yellow corn, 28-30c; No. 32 yellow corn, 26-28c; No. 33 yellow corn, 24-26c; No. 34 yellow corn, 22-24c; No. 35 yellow corn, 20-22c; No. 36 yellow corn, 18-20c; No. 37 yellow corn, 16-18c; No. 38 yellow corn, 14-16c; No. 39 yellow corn, 12-14c; No. 40 yellow corn, 10-12c; No. 41 yellow corn, 8-10c; No. 42 yellow corn, 6-8c; No. 43 yellow corn, 4-6c; No. 44 yellow corn, 2-4c; No. 45 yellow corn, 0-2c; No. 46 yellow corn, 0-1c; No. 47 yellow corn, 0-0.5c; No. 48 yellow corn, 0-0.2c; No. 49 yellow corn, 0-0.1c; No. 50 yellow corn, 0-0.05c; No. 51 yellow corn, 0-0.02c; No. 52 yellow corn, 0-0.01c; No. 53 yellow corn, 0-0.005c; No. 54 yellow corn, 0-0.002c; No. 55 yellow corn, 0-0.001c; No. 56 yellow corn, 0-0.0005c; No. 57 yellow corn, 0-0.0002c; No. 58 yellow corn, 0-0.0001c; No. 59 yellow corn, 0-0.00005c; No. 60 yellow corn, 0-0.00002c; No. 61 yellow corn, 0-0.00001c; No. 62 yellow corn, 0-0.000005c; No. 63 yellow corn, 0-0.000002c; No. 64 yellow corn, 0-0.000001c; No. 65 yellow corn, 0-0.0000005c; No. 66 yellow corn, 0-0.0000002c; No. 67 yellow corn, 0-0.0000001c; No. 68 yellow corn, 0-0.00000005c; No. 69 yellow corn, 0-0.00000002c; No. 70 yellow corn, 0-0.00000001c; No. 71 yellow corn, 0-0.000000005c; No. 72 yellow corn, 0-0.000000002c; No. 73 yellow corn, 0-0.000000001c; No. 74 yellow corn, 0-0.0000000005c; No. 75 yellow corn, 0-0.0000000002c; No. 76 yellow corn, 0-0.0000000001c; No. 77 yellow corn, 0-0.00000000005c; No. 78 yellow corn, 0-0.00000000002c; No. 79 yellow corn, 0-0.00000000001c; No. 80 yellow corn, 0-0.000000000005c; No. 81 yellow corn, 0-0.000000000002c; No. 82 yellow corn, 0-0.000000000001c; No. 83 yellow corn, 0-0.0000000000005c; No. 84 yellow corn, 0-0.0000000000002c; No. 85 yellow corn, 0-0.0000000000001c; No. 86 yellow corn, 0-0.00000000000005c; No. 87 yellow corn, 0-0.00000000000002c; No. 88 yellow corn, 0-0.00000000000001c; No. 89 yellow corn, 0-0.000000000000005c; No. 90 yellow corn, 0-0.000000000000002c; No. 91 yellow corn, 0-0.000000000000001c; No. 92 yellow corn, 0-0.0000000000000005c; No. 93 yellow corn, 0-0.0000000000000002c; No. 94 yellow corn, 0-0.0000000000000001c; No. 95 yellow corn, 0-0.00000000000000005c; No. 96 yellow corn, 0-0.00000000000000002c; No. 97 yellow corn, 0-0.00000000000000001c; No. 98 yellow corn, 0-0.000000000000000005c; No. 99 yellow corn, 0-0.000000000000000002c; No. 100 yellow corn, 0-0.000000000000000001c.

Chicago, Nov. 17.—The following cash prices were reported by the Chicago Board of Trade: No. 1 yellow corn, 88-90c; No. 2 yellow corn, 86-88c; No. 3 yellow corn, 84-86c; No. 4 yellow corn, 82-84c; No. 5 yellow corn, 80-82c; No. 6 yellow corn, 78-80c; No. 7 yellow corn, 76-78c; No. 8 yellow corn, 74-76c; No. 9 yellow corn, 72-74c; No. 10 yellow corn, 70-72c; No. 11 yellow corn, 68-70c; No. 12 yellow corn, 66-68c; No. 13 yellow corn, 64-66c; No. 14 yellow corn, 62-64c; No. 15 yellow corn, 60-62c; No. 16 yellow corn, 58-60c; No. 17 yellow corn, 56-58c; No. 18 yellow corn, 54-56c; No. 19 yellow corn, 52-54c; No. 20 yellow corn, 50-52c; No. 21 yellow corn, 48-50c; No. 22 yellow corn, 46-48c; No. 23 yellow corn, 44-46c; No. 24 yellow corn, 42-44c; No. 25 yellow corn, 40-42c; No. 26 yellow corn, 38-40c; No. 27 yellow corn, 36-38c; No. 28 yellow corn, 34-36

Farm and Dairy

By L. W. LIGHTY

In a letter of inquiry this occurs: "If we want good dairy cows we must grow them. I found buying more costly in the end, though for awhile it seemed as though growing them was more expensive."

This writer, though he asks a number of questions, has pretty well mastered the production of good cows. The matter of prime importance is to have good ancestors. All that has been said about the importance of a good sire is true. No one should go to the trouble and expense of raising a heifer from a poor nondescript sire, because the chances of getting good results are too uncertain.

We must not forget the dam is of fully as much importance in giving us assurance of good progeny. While a trouble may not be inherited a tendency that way surely is transmitted. The cow that stands dry too long, the cow that is subject to gargety udder trouble or other physical weaknesses will often transmit a tendency for the progeny to go that way. We want a cow that gives a profitable yield of milk but we also want a cow that is immune from the little faults and ailments that so often eat up all the profits.

The Question of Feeding Milk

To put it mildly it is very foolish to skip the calf on milk for the first twelve weeks of its life. This is not saying that milk should not be fed for a longer period, but if we deprive the calf of its natural food during the first three months of its life we stunt it and it is always questionable if we will ever realize the full possibilities in the future cow.

What does a man gain by skimping the calf on milk? Nearly always he adds to the already large surplus of milk and the pay he gets for surplus is often not as much as the actual feeding value to the calf. That is robbing Peter to pay Paul. If you have a good prospective calf to start with it surely will be profitable business to feed milk for three or four months to start it well, and a good start is half the battle won.

The Quicker You Turn Your Dollar

Almost half a century ago I was in the mercantile business. There I learned if I invested my dollars in goods that passed from my shelves in a few weeks the business was profitable, but the goods that laid on the shelves a year or more never helped much in making a living.

Business is business everywhere. If I could take a baby cow and evolve her into a good milking cow in 22 to 26 months, why dawdle around 30 to 36 months? The theory that the cows will not attain size if bred early is largely nonsense. Give the calf a full supply of the feed it needs and it will be a surprisingly well grown heifer at 14 to 16 months.



Mrs. Hughes and Eleanor

Feed well enough to lay on some fat after breeding and you can have size and production at two years. If the management is right you will have all the size that is desirable at three years. With me this is not theory. I did it. The great trouble is that the young things are not pushed ahead and so it takes more time to bring them into profit. We lose time and money.

Turn the dollar quickly. Look at the poultry folks. My neighbor hatches great batches of chicks in May. In October when the eggs go up those birds begin to shell out the eggs and do it all winter. In olden days we



Snow Drop's Buttercup

Some West Virginia Jerseys

WE cannot always measure profit in dollars and cents as will be brought out in the adventures in dairying of the Hughes family of Marshall county, West Virginia. Mr. and Mrs. Hughes and daughter Eleanor not only increased their profits but set two state and one national production records.

The Hughes's are firm believers that "blood will tell," therefore they have devoted their interest toward building up a herd of pure-bred Jerseys of high production.

Brookside Farm contains less than one hundred acres. Since the chief source of income is dairying the Hughes's are quick to realize that in order to be successful they must keep records, therefore, their herd was entered in the Herd Improvement Association two years ago.

When the second year's testing was begun they decided to put three head of the herd on advanced registry test. Each member of the family had a part in this undertaking. Mr. Hughes started Snow Drop's Buttercup 547668 on test October 17, 1928. For nine consecutive months, starting with

thought they did well if they started laying the next March.

Too Many Head of Livestock

Several inquirers ask if it were better to purchase more feed or sell some of their livestock. The answer is, of course, to sell some of the livestock. The farmer who has too many head of livestock is in a bad way. He is either overproducing or he is not managing his land properly. The farmer who has too many head of livestock is in a bad way. He is either overproducing or he is not managing his land properly.

The first-class animals, be they dairy or swine, usually pay for their feed. But this is a time to weed your herd and cull close while at it. The rest will pay all the better, because the feed is likely to be comparatively abundant.

Popular Small Farm

In spite of dry weather and the talk about overproduction there are many people, young and old, farm and city born, successful and unsuccessful, asking about the route to the country. And generally they want to go by the way of the small farm. Some of them want to do their jobs in town till they get a number of culls in the yard and should be sold even at a seeming sacrifice before they eat any more of the expensive feed of the day.

Rosy Visions

It is the small farm that attracts the eye of the unsettled town dweller. "We want to raise chickens and have cream and butter and eggs and fruit and vegetables," they say. Every snaggy apple tree and cattle shed bush they see visions of lush fruit and berries, while the unimproved farm houses turn in their minds' eyes to comfortable, desirable dwellings. It is a pleasure to the real country lovers, to assist unhappy middle-aged men and women to get back on some kind of farm and to encourage the steady migration, but the restless flitters from location to location are hard to

It is possible to get small farms in sections as low as fifty dollars per acre with the buildings all run down. Occasionally when an estate is settled and the heirs are impatient for their small bit of inheritance, farms go for less than that. The prospective buyers cannot see why the government does not advance the purchase price of twenty thirty-acre farms and then add a few more for the buyer to get some relief for anyhow, if not to help the farmers? When a man begins to talk like that there is no help for him. Perhaps he has enjoyed good times until recently but he says no more. He wants to help folks why not let any one who applies?

In Favorable Position

To those who in the past few years have quietly picked up small farms and improved them the outlook is bright. A few cows, a few sheep, plenty of chickens, fruit, and such "small plunder," as the old farmer calls it, will keep a family in comfort. A hard working man who weekly markets twenty pounds of butter, milk, eggs, chickens, vinegar, vegetables, butter, cream, flowers according to season and all kinds of fresh produce in chunks during cold weather is a carefully arranged list so that nothing is forgotten. He sells shade to town people, gets bean poles and sells big clumps of asparagus so that a crop may quickly be raised by those who have small plots, supplies corn for feeding birds, gets old apple wood for a fire, and makes trifling articles to raise a fine calf occasionally and keeps his eyes open to get twenty dollars weekly.

Inquiries there will not be long. Small farms to go round, but it is always the possibility of taking a larger farm, getting a federal loan on it and then dividing it up, necessitates new buildings, but an abandoned farm house or barn can be bought nearby and moved to the new location. There is this to think about it, the really energetic man will succeed while the others will stay where they are. It depends on the man and his land and not the size of the farm. Some of the larger farms that are really better bargains than

"My job is to get
**Best Results at
Least Possible
Feed Cost**"
says well-known herdsman



So he tests all
leading feeds - then finds
B-B gives best results

WHEN Maynard Hack, Herdsman of the Cold Springs Guernsey Farms, St. Johns, Penna., tells you that Bull Brand Dairy Ration produces the most milk at the lowest feed cost he certainly knows what he is talking about. For he has tested all of them and here is what he says:

"My job is to get best possible results at lowest feed costs. I have tried every one of the leading dairy feeds sold in this community regardless of cost and have found Bull Brand gives better results than any other feed we have used."

What the Test Proved

"Our herd consists of nearly all imported Guernseys costing up to \$2500.00 each, so it would be impractical to feed anything but the best. Before feeding B-B to our entire herd, we ran a six months' test against another highly advertised feed and found that Bull Brand produced more milk, kept the cows in much better body weight and we never lost even a teat. Our cows came through the lactation period in wonderful shape which means much to us as our young stock from this herd are valuable."

Interesting as Mr. Hack's experience has been, it is not an unusual one. Thou-

sands of dairymen have tried Bull Brand against other feeds—both commercial and home mix—and have found the answer the same: *Bull Brand produced the most milk at the lowest feed cost.* And that's what most feeders are looking for.

The Guarantee That Protects You

Whether you own pure bloods or grade cows, you can try B-B feed with the positive assurance that if you don't have the same satisfactory results as these other dairymen, the trial costs you nothing. Here is our offer:

Order enough Bull Brand to last one or two cows for 30 days. Feed according to the directions in the sack. Then watch the milk flow increase. But if B-B doesn't prove most productive per dollar of feed cost, hand the empty sacks back to your dealer and he'll refund every cent you paid for it.

The sooner you start this test, the sooner you'll find the way to make dairying pay bigger profits. If you can't get B-B from your dealer, write us direct.

MARITIME MILLING CO., Inc.
Buffalo, N. Y.

M-156



The Home of the Feed that's Guaranteed

B-B
24%
DAIRY RATION
Feed with coarse roughages—timothy, mixture of timothy and clover, red top grasses, corn fodder.



20% DAIRY FEED
Feed with clover hay or medium quality alfalfa and silage.



16% DAIRY FEED
Feed with high quality clover or second growth alfalfa. Excellent for dry cows.



Feed Bull Brand Vitamized Laying Mash, Scratch Feeds, Chick Starter and Growing Feeds.



BULL BRAND FEEDS

Advertisements pay you in time and money. Read them regularly.

DAIRY CATTLE

Registered HOLSTEIN COWS

Also Registered Collie Dogs four months old, natural heeler, ten dollars. GEORGE BARK, Conotton, Ohio

FOR SALE.—Seven grade Jersey Heifers, Tuberculin and Blood Tested, Red, \$250.00 each. J. M. Rodgers, phone 34-J, West Alexander, Pa.

AYRSHIRE CATTLE of the best blood lines. Red, 3-J, Accolled, a sample of milk, etc. and

SWINE

PIONEER HERD—POLAND-CHINAS of approved blood lines. Service boars, bred sows, full pigs. You will want a look in at this splendid herd. Satisfactory purchases in many states. Priced reasonable. Address: C. S. Epley, Zanesville, O.

SPOTTED POLAND-CHINA PIGS at \$15.00 each. Two tried yearling sows, bred, at \$50.00 each. One yearling boar at \$50.00. All extra good and shipped C.O.D. Guaranteed to please. A. J. Starkey, R. 2, Steubenville, Ohio

LOW PRICE on Big Type poligred service boars, pigs and bred sows. Champ, blood, must please. C. E. Cassel, Hershey, Pa.

REGISTERED BIG TYPE POLAND-CHINAS. LYNN PETERS, Woodland, Pa.

BIG TYPE POLAND-CHINA BRED GILTS. Big

Reg. Spotted Poland-Chinas. Full pigs ready. Few bred gilts, bred sows and boars ready for service. A. M. Kennel, R. 2, Honey Brook, Pa.

O. I. C.'s. Choice Sept. Pigs \$10 each. Poligred furnished Pigs and Pigs not able. Satisfaction guaranteed. C. E. Bell, Millersburg, Ohio

LARGE BERKSHIRES all ages of usually for sale. Dills & German, Roseville, Ohio

DURCO BOARS and GILTS of April farrow. \$2000 each. Red-topped. Also full pigs. D. H. JOHNSON, West Liberty, Ohio

Feeding Pigs. 15 to 20 lbs. \$4.50 to \$5.00 according size. Truck delivery on large lots. Mostly Poland-Chinas. Stanley Short, Cheswold, Del.

GOATS Thoroughbred, from world's heaviest milker, half, first Subans, Tappanville, 225

FEED DRIED MOLASSES BEET PULP AND MAKE MONEY

No other supplemental feed can add to your profits like Dried Molasses Beet Pulp. It blends perfectly with other feeds—it makes the whole ration work harder for you. As a milk producer it has no equal.

Dried Molasses Beet Pulp is all of the sugar beet after extraction of sugar. As a pure succulent, vegetable food it makes a highly palatable ration. Dairy cows, beef cattle and sheep relish it. In the stomach it swells to 5 or 6 times its own bulk, loosens up the mass of feed and insures perfect digestion of the entire ration. No feed is wasted.

Fits Any Ration

Dried Molasses Beet Pulp may be used in a variety of ways. It supplements pasture, replaces silage, corn and other carbohydrate feeds. Where hay is short or high priced, 6 pounds of Dried Molasses Beet Pulp will do the work of 10 pounds of hay and do it better.

Order Now

The demand for Dried Molasses Beet Pulp has always exceeded the supply—thousands of dairymen, cattle and sheepmen are feeding it. Prices are low. See your dealer and place your order now.

Shipments made direct from factory located nearest to buyer. Write for free booklet "Profitable Feeding" The Larrowe Milling Co. Dept. PF 4 DETROIT MICHIGAN

When writing advertisers please mention Pennsylvania Farmer.

"A thousand Times Better than the old way"



Modern, machine grooming is the safe, sanitary way—the greatest advance in dairy practice in recent years. Results are amazing in the way it lightens labor, improves the quality and quantity of milk produced, and returns its first cost by big dividends. Conveniently portable, mechanically simple, requiring practically no attention, the Hinman Groomer gets the embedded dust, loose hair and dirt, keeping impurities and bacteria out of the air, protecting the milk and utensils. Use it regularly on cows and horses, car upholstery and for household purposes. Write today for illustrated folder with free demonstration offer.

HINMAN MILKING MACHINE CO., INC.
Dept. P.
Ossida, N. Y.

HINMAN GROOMER

Starts Hens Laying

Here's a New Way to Get Eggs in Winter. Costs Nothing to Try

Rev. R. V. Andrews, Eckerty, Ind., has a real idea for chicken raisers who are not getting plenty of eggs.

He says: "I notice in the paper where a lady gave Don Sing to 26 hens and got 26 eggs a day in winter. I can beat that. My 30 hens, after having Don Sing, laid 30 to 34 eggs a day after day. The hens were in fine health and kept laying all winter."

Don Sing, the Chinese brand of tablets which Mr. Andrews used, are opening the eyes of chicken raisers all over America. These tablets can be obtained from Hurrell-Dugger Co., 483 Postal Station Bldg., Indianapolis, Ind. Poultry raisers whose hens are not laying well should send 20 cents for a trial package for \$2 for the extra large size, holding 3 times as much. Don Sing is positively guaranteed to do the work or money refunded, so it costs nothing to try. Now is the time to start giving Don Sing to your hens, so you will have a good supply of fresh eggs all winter.

FALL CHICKS AND DUCKLINGS

Of best quality. Postage paid and live arrival guaranteed. Fall chicks and ducklings are best for profitable broilers. Winter eggs and Spring eggs. Buy now and reap the profits. Mature breeders at sight prices. 40 breeds to choose. Catalog FREE.

NABOB POULTRY FARM, Box 22, CAMBRIE, OHIO

Truslow Chicks

Result of 49 Years Breeding

Let me give you a book telling about our stock—about broilers and about ducks. Write today. It's FREE.

TRUSLOW POULTRY FARM, Inc., Chestertown, Md.

Navy Brand Concentrated Buttermilk

From the best milk solids, 6 per cent lactic acid, thick as custard with no foreign ingredients. Reduces fat-packing and lessens danger from conditions. Increases egg production and promotes fertility and hatchability. Good for chicks, broilers and laying hens. Sold direct from the factory in barrels of about 485 lbs. Half barrel cost \$39.00. Write for prices.

TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, PA.

BROILER-RAISERS

SHIPPING CRATES LOANED FREE

SHIP YOUR LIVE BROILERS and other poultry to New York's oldest Live Poultry House. Since 1882. We are located within 10 minutes of the city. We receive made daily. Highest prices. Our outlet is unlimited. Inquire about us. Write for quotations. Also, shipping instructions. Broiler Calendar. Folder P-2. **KRAKAUER POULTRY CO., Inc., West Washington Market, New York City.**

ULSH'S Superior Chicks

White Wyandottes, White Rocks and Barred Rocks. Write for Fall & Winter prices. Hatcheries receive the year round. 100% live delivery guaranteed. Postage paid.

JAS. E. ULSH, Box P, Beaver Springs, Pa.

POULTRY PAPER 12 BIG ISSUES 25c

Write or clip this ad on a letter with your name and address and send it to the publisher. We will send you the next 12 issues. American Poultry Journal, 175 So. Clark Street, Chicago.

WHITE WYANDOTTE - CHICKS

A.P.A. Certified. Disease free. Latest Type. Heavy. Laying. Large. Bred. Bred. Bred. Special price on Pullet. Postage Free. Sherry Bowden & Son, Box 195B, Mansfield, O.

To know what to buy—read the advertisements. They will keep you informed of the latest and best products of the manufacturers. Their aim is to meet your needs. You will find that time spent in reading the advertisements is time well spent. Read them regularly, with care, and when answering, mention Pennsylvania Farmer.

Colds in Poultry Quickly Banished

Wheezing, Rattling, Choking, Ends. Trouble Stopped in 48 Hours

Readers with colds in their flocks should read this letter from Thomas Pulliam, Shively, Ky. He says:

"I have had birds with their eyes closed from colds, and have saved them all. One cockerel was nearly dead. He lost 5 pounds. I gave him group over and in two weeks he was full of feathers and fighting every rooster on the place. He is doing better than ever. It is so easy to save them with Group-Over."

It is amazing how many communicable colds in poultry. A few drops in the nostrils usually banishes every symptom overnight—while a little in the drinking water, as is recently done, cures the whole flock. For a liberal supply, send 20 cents for \$1 for the extra large size to Hurrell-Dugger Co., 483 Postal Station Bldg., Indianapolis, Ind. A Group-Over is guaranteed to do the work or money refunded. 6 cents each in 10.

Nest Box Notes

By R. L. SCHARRING-HAUSEN

AT this season of the year poultry of all ages is especially subject to sickness of various sorts. Strict sanitation, coupled with the use of a good poultry disinfectant in the buildings, will help a lot to avoid trouble. Some poultrymen also use a mild disinfectant in the water, as many poultry ailments are transmitted from bird to bird through the drinking vessels.

NO flock should be allowed to go into the winter in a lousy condition. If the birds are handled individually they may be dusted with sodium fluoride, while the nicotine sulphate method is the best flock treatment. It is reported that this material, painted on the roosts late in the afternoon, will be vaporized by the heat of the birds' bodies, even during cold weather, so as to penetrate the feathers and kill the lice during the night.

FALL colds may be treated by applying a drop of 15 per cent argyrol to each nostril and eye with a medicine dropper. This remedy can be obtained at any drug store. Another treatment is to spray the birds on the roost at night with a well-known commercial disinfectant containing hypochlorites as the active principle. Directions for its use come on the bottle.

BOTH young and old birds should be fed liberally on grain at this season, and receive cod-liver oil, milk and alfalfa leaf meal in the ration. Direct sunlight, or sunlight which has passed through one of the glass substitutes admitting the ultra-violet rays is also beneficial. Birds so treated will keep in better health, and the breeders will give a higher percentage of fertility and hatchability than if these things are not present.

MANY poultrymen find that a moist mash containing condensed buttermilk, fed at noon, helps to increase production.

BEFORE it gets too cold all leaks in the roof should be stopped, cracks and holes in the siding and floor plugged up, and broken window lights replaced. No bird is going to give a good account of herself in a leaky, drafty building.

If there are many cracks in the side walls it will pay to line them with one of the sheet fiber insulating materials on the market. Such insulation will not only stop drafts, but will protect the birds against sudden weather changes. There is much evidence to show that a mild even temperature in the laying houses is a great aid to winter production.

Poultry Problems

Turkeys Are Droopy

I have two turkeys which are droopy. They have a yellow diarrhea and eat little. Their skin is cracked, yellow and scaly. I have used a powder for lice. Would that cause it? It is very strong with carbolic acid.

Mrs. Edwin Gilford, Huntingdon county, Pa.

ANY standard lice preparation, used according to directions, should be harmless to turkeys. A yellowish diarrhea in these birds always directs suspicion toward blackhead, a disease of turkeys which is incurable. If you have other turkeys keep the sick ones by themselves until you see what happens to them.

It is also possible that these birds have worms, and it might pay to give them any of the well-known worm treatments, following directions carefully.

Poultry growing mash, with wheat and oats for grain, would be a good combination for turkeys. These grains should be sound and dry. New grain, especially corn, may cause indigestion in turkeys, and if your birds have been fed new corn, that may be all which ails them.

R. L. S.

Range Paralysis

Can you tell me what to do for my chickens and what is wrong with them? A hen a few months ago did not seem to have control of her movements. She ate heartily and kept weight. At night she would be in a corner of the chicken house throwing her head back in a queer way. Now some of the young chickens are acting similarly. One today could not balance herself and would go down. Mrs. Joseph Gable, York county, Pa.

TROUBLE you describe may be due to range paralysis, an ailment for which there seems to be no certain remedy; or it may be due to general unthriftiness, possibly the result of worm infestation.

My suggestion would be first of all to remove the ailing birds from the flock and then give the remainder of the worm pills which you see advertised. A day or two after the treatment, remove the litter and clean the house thoroughly. Good

feeding, especially with the use of milk and cod-liver oil, may bring your birds around all right.

R. L. S.

Sunflower Seed

Would you please tell if you think sunflower seeds are good feed for laying hens? Would they take the place of corn in the ration?

Is it best to keep hens shut in all the time this time of year, or is it better to let them out part of the day?

Clearfield county, Pa.

SUNFLOWER SEEDS are commonly added to the scratch feed because they are believed to promote feather growth. You could feed them in limited quantities to your flock, but they would not take the place of corn, and generally are higher in price besides.

Most commercial poultrymen keep their layers confined, or give them very limited run, and get very good results that way. However, hens that are to be used as breeders will probably derive benefit from being let out.

R. L. S.

Chickens Eat Feathers

I have some spring chickens (Rhode Island Reds) which eat the feathers off one another. I would like to know the reason why they do this.

Elk county, Pa. Mrs. John Gahr.

CHICKENS of any age are fond of new feathers which contain blood in the quill, and sometimes form the habit of eating them and picking each other and even of eating dry feathers. Once this habit is formed I know of nothing which will stop it. Feather pulling is usually worse where the birds are crowded, and giving them more room may help somewhat.

R. L. S.

Fish Meal

Please tell me if fish meal is helpful or harmful to chickens.

York county, Pa. Minnie B. Yost.

FISH MEAL of good quality is a very good protein supplement in the poultry mash, and is commonly used to replace part of the meat scrap.

R. L. S.

FOR THE HOME

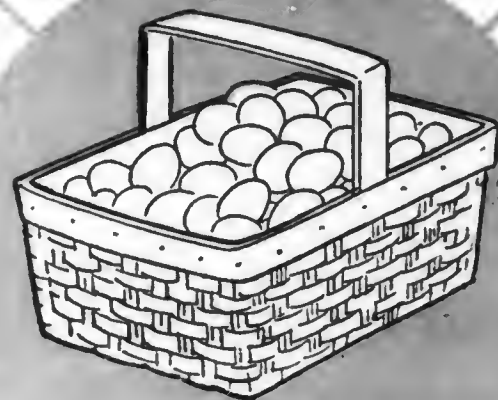
PEANUTS. JUNIOR HAND-PIEDED, \$1.00; 10 lbs. \$1.25; 25 lbs. \$2.50; 50 lbs. \$4.50; 100 lbs. \$8.00; express. Lankford, Franklin, Pa.

HOME MADE CANDY chews, assorted 5 lbs. \$1.50; postpaid, Edna Bremer, 20, Peoria, Pa.

OYSTERS.—BUY DIRECT through mail. Ural taste and flavor retained. Wm. S. Sunde, Sunde, Maryland.

YARN. KNITTING at bargain prices for 100 yds. \$1.15; 250 yds. \$2.15; 500 yds. \$4.15; 1000 yds. \$7.15; 2000 yds. \$12.15; 4000 yds. \$22.15; 8000 yds. \$42.15; 16000 yds. \$82.15; 32000 yds. \$162.15; 64000 yds. \$322.15; 128000 yds. \$642.15; 256000 yds. \$1282.15; 512000 yds. \$2562.15; 1024000 yds. \$5122.15; 2048000 yds. \$10242.15; 4096000 yds. \$20482.15; 8192000 yds. \$40962.15; 16384000 yds. \$81922.15; 32768000 yds. \$163842.15; 65536000 yds. \$327682.15; 131072000 yds. \$655362.15; 262144000 yds. \$1310722.15; 524288000 yds. \$2621442.15; 1048576000 yds. \$5242882.15; 2097152000 yds. \$10485762.15; 4194304000 yds. \$20971522.15; 8388608000 yds. \$41943042.15; 16777216000 yds. \$83886082.15; 33554432000 yds. \$167772162.15; 67108864000 yds. \$335544322.15; 134217728000 yds. \$671088642.15; 268435456000 yds. \$1342177282.15; 536870912000 yds. \$2684354562.15; 1073741824000 yds. \$5368709122.15; 2147483648000 yds. \$10737418242.15; 4294967296000 yds. \$21474836482.15; 8589934592000 yds. \$42949672962.15; 17179869184000 yds. \$85899345922.15; 34359738368000 yds. \$171798691842.15; 68719476736000 yds. \$343597383682.15; 137438953472000 yds. \$687194767362.15; 274877906944000 yds. \$1374389534722.15; 549755813888000 yds. \$2748779069442.15; 1099511627776000 yds. \$5497558138882.15; 2199023255552000 yds. \$10995116277762.15; 4398046511104000 yds. \$21990232555522.15; 8796093022208000 yds. \$43980465111042.15; 17592186044416000 yds. \$87960930222082.15; 35184372088832000 yds. \$175921860444162.15; 70368744177664000 yds. \$351843720888322.15; 140737488355328000 yds. \$703687441776642.15; 281474976710656000 yds. \$1407374883553282.15; 562949953421312000 yds. \$2814749767106562.15; 1125899906842624000 yds. \$5629499534213122.15; 2251799813685248000 yds. \$11258999068426242.15; 4503599627370496000 yds. \$22517998136852482.15; 9007199254740992000 yds. \$45035996273704962.15; 18014398509481984000 yds. \$90071992547409922.15; 36028797018963968000 yds. \$180143985094819842.15; 72057594037927936000 yds. \$360287970189639682.15; 144115188075855872000 yds. \$720575940379279362.15; 288230376151711744000 yds. \$1441151880758558722.15; 576460752303423488000 yds. \$2882303761517117442.15; 1152921504606846976000 yds. \$5764607523034234882.15; 2305843009213693952000 yds. \$11529215046068469762.15; 4611686018427387904000 yds. \$23058430092136939522.15; 9223372036854775808000 yds. \$46116860184273879042.15; 18446744073709551616000 yds. \$92233720368547758082.15; 36893488147419103232000 yds. \$184467440737095516162.15; 73786976294838206464000 yds. \$368934881474191032322.15; 147573952589676412928000 yds. \$737869762948382064642.15; 295147905179352825856000 yds. \$1475739525896764129282.15; 590295810358705651712000 yds. \$2951479051793528258562.15; 1180591620717411303424000 yds. \$5902958103587056517122.15; 2361183241434822606848000 yds. \$11805916207174113034242.15; 4722366482869645213696000 yds. \$23611832414348226068482.15; 9444732965739290427392000 yds. \$47223664828696452136962.15; 18889465931478580854784000 yds. \$94447329657392904273922.15; 37778931862957161709568000 yds. \$188894659314785808547842.15; 75557863725914323419136000 yds. \$377789318629571617095682.15; 151115727451828646838272000 yds. \$755578637259143234191362.15; 302231454903657293676544000 yds. \$1511157274518286468382722.15; 604462909807314587353088000 yds. \$3022314549036572936765442.15; 1208925819614629174706176000 yds. \$6044629098073145873530882.15; 2417851639229258349412352000 yds. \$12089258196146291747061762.15; 4835703278458516698824704000 yds. \$24178516392292583494123522.15; 9671406556917033397649408000 yds. \$48357032784585166988247042.15; 19342813113834066795298816000 yds. \$96714065569170333976494082.15; 38685626227668133590597632000 yds. \$193428131138340667952988162.15; 77371252455336267181195264000 yds. \$386856262276681335905976322.15; 154742504910672534362390528000 yds. \$773712524553362671811952642.15; 309485009821345068724781056000 yds. \$1547425049106725343623905282.15; 618970019642690137449562112000 yds. \$3094850098213450687247810562.15; 1237940039285380274899124224000 yds. \$6189700196426901374495621122.15; 2475880078570760549798248448000 yds. \$12379400392853802748991242242.15; 4951760157141521099596496896000 yds. \$24758800785707605497982484482.15; 9903520314283042199192993792000 yds. \$49517601571415210995964968962.15; 19807040628566084398385987584000 yds. \$99035203142830421991929937922.15; 39614081257132168796771975168000 yds. \$198070406285660843983859875842.15; 79228162514264337593543950336000 yds. \$396140812571321687967719751682.15; 158456325028528675187087900672000 yds. \$792281625142643375935439503362.15; 316912650057057350374175801344000 yds. \$1584563250285286751870879006722.15; 633825300114114700748351602688000 yds. \$3169126500570573503741758013442.15; 1267650600228229401496703205376000 yds. \$6338253001141147007483516026882.15; 2535301200456458802993406410752000 yds. \$12676506002282294014967032053762.15; 5070602400912917605986812821504000 yds. \$25353012004564588029934064107522.15; 10141204801825835211973625643008000 yds. \$50706024009129176059868128215042.15; 20282409603651670423947251286016000 yds. \$101412048018258352119736256430082.15; 40564819207303340847894502572032000 yds. \$202824096036516704239472512860162.15; 81129638414606681695789005144064000 yds. \$405648192073033408478945025720322.15; 162259276829213363391578010288128000 yds. \$811296384146066816957890051440642.15; 324518553658426726783156020576256000 yds. \$1622592768292133633915780102881282.15; 649037107316853453566312041152512000 yds. \$3245185536584267267831560205762562.15; 1298074214633706907132624822305024000 yds. \$6490371073168534535663120411525122.15; 2596148429267413814265249644610048000 yds. \$12980742146337069071326248223050242.15; 5192296858534827628530499289220096000 yds. \$25961484292674138142652496446100482.15; 10384593717069655257060998578440192000 yds. \$51922968585348276285304992892200962.15; 20769187434139310514121997156880384000 yds. \$103845937170696552570609985784401922.15; 41538374868278621028243994313760768000 yds. \$207691874341393105141219971568803842.15; 83076749736557242056487988627521536000 yds. \$415383748682786210282439943137607682.15; 166153499473114484112975977255043072000 yds. \$830767497365572420564879886275215362.15; 332306998946228968225951954510086144000 yds. \$1661534994731144841129759772550430722.15; 664613997892457936451903909020172288000 yds. \$3323069989462289682259519545100861442.15; 1329227995784915872903807818040344576000 yds. \$6646139978924579364519039090201722882.15; 2658455991569831745807615636080689152000 yds. \$13292279957849158729038078180403445762.15; 5316911983139663491615231272161378304000 yds. \$26584559915698317458076156360806891522.15; 10633823966279326983230462544322756608000 yds. \$53169119831396634916152312721613783042.15; 21267647932558653966460925088645513216000 yds. \$106338239662793269832304625443227566082.15; 42535295865117307932921850177291026432000 yds. \$212676479325586539664609250886455132162.15; 85070591730234615865843700354582052864000 yds. \$425352958651173079329218501772910264322.15; 170141183460469231731687400709164105728000 yds. \$850705917302346158658437003545820528642.15; 340282366920938463463374801418328211456000 yds. \$1701411834604692317316874007091641057282.15; 680564733841876926926749602836656422912000 yds. \$3402823669209384634633748014183282114562.15; 1361129467683753853853499205673312845824000 yds. \$6805647338418769269267496028366564229122.15; 2722258935367507707706998411346625691648000 yds. \$13611294676837538538534992056733128458242.15; 5444517870735015415413996822693251383296000 yds. \$27222589353675077077069984113466256916482.15; 10889035741470030830827993645386502766592000 yds. \$54445178707350154154139968226932513832962.15; 21778071482940061661655987290773005533184000 yds. \$108890357414700308308279936453865027665922.15; 43556142965880123323311974581546011066368000 yds. \$217780714829400616616559872907730055331842.15; 87112285931760246646623949163092022132736000 yds. \$43556142965880123323311974581546011066368

Tune in on **THE SUNSHINE COUNSELLOR** every Friday, 12:30 Noon, Central Standard Time... Poultry Market Reports... Sunshine Health Talk... Stations: KDKA-WLW, WREN, KYW, KSTP, WOC, WHO, KWK, WDAF, WJR, WOW, KFAB, KOA.



Don't lose those high-priced winter eggs

Don't let your egg production drop way down when the weather gets cold. You don't need to. There is enough natural warmth and sunshine for your hens and pullets even on the wintry days. And **CEL-O-GLASS** puts this warmth and sunshine *inside* your laying house. Instead of fewer eggs, you'll have stronger, healthier hens that keep on producing just when egg prices are highest.

It doesn't take long for extra eggs to pay the cost of the **CEL-O-GLASS**, as you will see from this simple illustration:

Fifty to sixty square feet of **CEL-O-GLASS** is enough for 100 hens. Now, if those hens, as a result of this installation, could be made to produce four extra eggs each during a winter month, and eggs were selling at only 25¢ a dozen, that would figure to about \$8.00. On this basis, your **CEL-O-GLASS** would be paid for during a single month. After that, everything would be clear profit.

And you *ought* to get results like this. Just last winter an experiment station made a test to discover how much difference in egg production occurs when **CEL-O-GLASS** is used in place of glass. Under

severe testing conditions the average lay was 10 eggs per pullet per month in a **CEL-O-GLASS** house, and only 5.2 eggs in a glass front house. 92% in favor of **CEL-O-GLASS**!



Properly installed, **CEL-O-GLASS** will last for years. To ensure longer life and correct ventilation install on frames in a vertical position. Hinge frames to swing in and to the side or up under the roof during the summer months. Or construct frames to slide down behind the front, as in the laying house above—located at the Iowa Experiment Station.

At the Vineland Egg-Laying Contest, winter egg production has risen 78% since **CEL-O-GLASS** was installed.

Clark L. Baker, of Lafayette, Indiana, writes, "I sell my eggs to the hatchery during hatching season and I have found that by the use of **CEL-O-GLASS** more eggs are produced. These eggs are more

fertile and produce chicks with more vigor and stronger vitality." More eggs again!

And Mrs. G. L. Welstead, of Dixon, Ill., writes, "I have one house with **CEL-O-GLASS** windows and my hens lay and lay all winter. After starting to lay, my pullets averaged 15 eggs per month."

You can get just as good and better results. And you can have them not just this year, but year after year. Install **CEL-O-GLASS** properly and it will last for years. Yet, it makes such a big difference in egg production that it pays for itself long before it needs replacement.

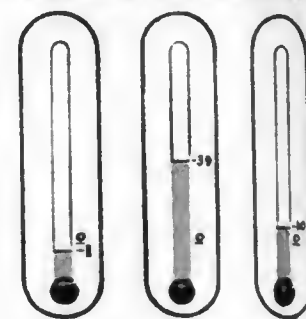
How **CEL-O-GLASS** Works

CEL-O-GLASS floods your laying house with the health-giving ultra-violet rays of sunlight. (Remember—these valuable rays are barred out by ordinary glass and soiled cloth curtains.) These rays cause the hen's blood to manufacture Vitamin D, so that she makes better use of calcium and phosphorus—the bone-building and shell-making minerals. You not only get more eggs but you practically eliminate thin-shelled eggs. And your hens will end the winter laying season stronger and heavier.

The natural, safe way to get more eggs

The **CEL-O-GLASS** way is Nature's way of administering Vitamin D to your flock.

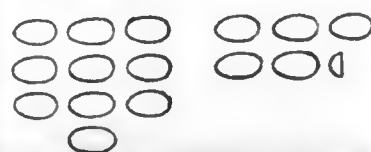
Temperature Test at New Jersey Experiment Station Poultry Farm



Outside Temperature 1° below zero
Temperature in **CEL-O-GLASS** house 10° above
Temperature in glass front house 39° above

Experiment Station Egg Production Test

In this test pullets behind **CEL-O-GLASS** laid 92% more eggs than pullets behind glass.



These fine White Leghorns are typical of the many large flocks bred by Ker Thayer, Frenchtown, N. J. Owen Kerr, says, "Since installing **CEL-O-GLASS** in our laying houses we have better health and egg production. Also our houses are warmer."

And Nature's way is always the best way.

Also, **CEL-O-GLASS** houses are warmer. At the New Jersey Experiment Station Poultry Farm, a **CEL-O-GLASS** house registered an inside temperature 39° above when it was 1° below zero outside, while a house with glass windows but identical in every other way—registered 10° above. No hen lays when she is cold and uncomfortable.

CEL-O-GLASS also keeps your hens healthy, reduces mortality, and builds resistance to disease during the winter months.

Other Uses for **CEL-O-GLASS**

CEL-O-GLASS in brooder houses prevents chick mortality, raises healthy chicks—hog houses prevents weak legs. Good dairy barns, cold frames, hot beds, greenhouses, storm windows, storm doors, sleeping porches. It lets in the sun but keeps out the cold.

For your protection genuine **CEL-O-GLASS** is branded. The genuine product has an eight-year-old record of performance on farms all over the country. Many experiment stations endorse it. It has been constantly improved year by year—this year, in addition, the prices are the lowest in 6 years. It can be bought in hardware, lumber, seed and feed stores. If your local dealers cannot supply it, please write Acetol Products, Inc., Spruce Street, New York City.

CEL-O-GLASS

REG. U.S. PAT. OFF. U.S. PATENT 1,550,287

NOW AT LOWEST PRICES SINCE 1924

Insist on Genuine **CEL-O-GLASS**

CEL-O-GLASS is the only window material with a wire mesh base with published scientific proof that it increases egg production. Back of **CEL-O-GLASS** is an 8-year record of performance. Experiment stations in Vermont, New Jersey, Pennsylvania, Ohio, Kansas, Wisconsin, Iowa, Washington, and others, have proved the value of **CEL-O-GLASS**.



BRANDED FOR YOUR PROTECTION

Acetol Products, Inc., Dept. 1011
21 Spruce Street, New York City.

Gentlemen: Please send me copies of free blue print booklets checked.

☐ Laying House ☐ Hog House ☐ Cold Frames
☐ Brooder House ☐ Back Porches

Name _____

Address R. F. D. _____

Town _____

State _____

Get this Valuable Blue Print from Your Dealer!

Ask your dealer for the valuable free blue-print booklets or fill out the coupon and we will supply you. It contains complete plans and specifications together with valuable information about the **CEL-O-GLASS** poultry. Similar blue-print booklets available on greenhouses, back porches and cold frames.

PENNSYLVANIA FARMER

Published Weekly

Established 1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

November 29, 1930



Philadelphia

Pittsburgh

Harrisburg

PUT ETHYL TO WORK ON YOUR FARM

Ethyl Gasoline will increase the efficiency of your passenger car, your truck and your tractor. It will save you time, labor and expense.



Knocks out that "knock"

ETHYL GASOLINE

THE ACTIVE INGREDIENT USED IN ETHYL FLUID IS LEAD

© P. C. C. 1930

Farm Facts and Fancies

By ALVA AGEE

A GOOD many people in Europe and a relatively small number in this country want an abrupt change in the world's way of running its economic affairs. A few are moved by idealism, some by discontent, and there are those stirred by plain hatred of the successful under the existing order.

Always we have idealists, and it would be a barren world without them, but when they turn to an effort to tear down our economic system and try one of their own devising they take a risk that a practical man would never assume. Idealism works only when serving as a leaven. Then we have the people who want radical change because they do not like the successful. They cannot get far as leaders of opinion.

There remains the serious discontent of those who cannot get work and of those who work hard only to find themselves deeper in debt. They do not see the way out, and the inclination of a fraction of them is to take a chance on some radical change. A serious business depression is a new thing to millions of relatively young folks who regard high wages and a corresponding scale of living as normal. It puzzles them and they want somebody to blame.

Our Older Readers

Age does not necessarily bring us wisdom, I know, but memory should serve to steady our thinking. Always we have rushed ahead at times and overproduced, been checked and suffered business depression, and afterward gone ahead again with too much of a rush. It is the way we have, and our economic system has been worked out of the experience of men throughout the centuries who preferred personal liberty to possible fatness under the dictation of a leader who would tell each one what he might do with his own life and property. We prefer a system that may not work smoothly at times, but does leave us reasonable personal freedom.

Knowing this, and knowing that better times follow worse ones, we take the results that flow out of our freedom of action and have no hankering for any experiment in surrendering our right to live our lives and control our savings. We shall learn more and more to cooperate, but it will be free-will cooperation and not something dictated by a government whose leaders may not be as wise as we are.

This Matter of Wisdom

There may be a hundred men in a congressional district who think as straight and as deep as the one who has been selected to represent it in the Congress. This is specially true of everything affecting agriculture directly. If you were to go to one of these plain citizens and ask him just how he would solve the wheat-price problem or that of cotton, he probably would tell you that he sees no sure solution. Now, curiously enough, he would not trust his judgment if he had autocratic power to try out a plan, but he will put confidence in what is proposed by a man who differs from him only in the fact that he has the prestige of official position.

It is just that habit of assuming that political place gives wisdom that brings us all the popular confusion when legislation is proposed. Some legislators do have unusual wisdom, but they are the ones who do not believe that legislation can cure everything. Our Congress will again want to mend matters, and there will be the impulse to try, and there will be pressure to have the attempt made, but the man back home will do well to do his own thinking and measure all proposals by the conclusions he has reached for himself.

Matters Mending Themselves

Readers may not get any particular comfort from the thought, but matters in this world have a way of mending themselves in the long run when organized men fail at the job. I could multiply examples in modern and earlier history. Personally I bank a good deal on this fact right now. Our machine age has brought greater ability to produce than ability to direct our energies. It is idle to say that we have reached the highest level of living we want; it would keep everybody hustling to keep working on such a level, each one working to supply wants.

Just now there are two evils: One is lack of readjustment after displacement of workers by machine, and the other is too much production of certain things that we are accustomed to supply. When we figure the possibilities of basic supplies like wheat, cotton, sugar, copper, oil, etc., the future looks bad enough, but is in just such times in the past that matters began to right themselves. Probably a little later we shall look back and see that prices had struck bottom at this time, and when bottoms are reached prices start to mend and do not wait on our preconceived ideas about the situation. The price back may be slow and uneven and not very heartening, but it is a price back.

The Property Tax

The author of a bulletin says: "The usual opinion of the farm population seems to be that the property tax is still fits rural conditions with satisfaction and might be made fit better if property income were given more consideration in the methods of property assessment. The author says that the expectation 'for the time being is the retention of the property base for a greater part of farm taxation was more attention being given to methods of valuation to the end that equity in terms of tax-paying ability may be better attained.'"

That is to say, as the author of the bulletin believes, attention to center on equalization of the burden of taxation among farmers and owners of real property rather than redistribution of cost of government among all the people according to net income and ability to pay.

I believe the big problem is distribution of cost of government among all the people according to net income and ability to pay. may doctor up the situation as an inequality of appraisement of property is concerned, but it is more important to shift a big part of the tax burden upon those who pay and are escaping any tax. A far less important matter when basis for taxation is largely the income of farmers and all others.



MARKET PLACE

By W. R. WHITACRE

For the past six years I have investigated dozens of complaints from farmers who have shipped produce to commission dealers in city markets. In many cases of the grower have shipped their goods to unscrupulous and crooked dealers in the hope of obtaining a premium over the regular market price, while in other instances the farmers' carelessness was the cause of the poor returns. The Thanksgiving and Christmas holidays bring more complaints than all other seasons of the year. There are two chief reasons for this. The first is that at this time there are more inexperienced shippers than at any other season. The second is really based on the first, since the "crook" knows that the inexperienced producer is easy and will fall for his promises of high returns, and for that reason more crooks are operating than at other times during the year. In fact, there are men who are in business only during the holiday season and who make a comfortable income peddling shipments and pocketing the returns.

A Service to Thousands

No class of middlemen has been criticized, abused and slandered more than the commission man. No use saying that there are crooks and crooks, but the reliability of commission men in general compares well with that of any other class of business men. They perform services at a reasonable charge which no other agency is in a position to perform. They serve the thousands of small unorganized shippers and provide an outlet for unstandardized products. They receive consignments of produce from growers who do not understand marketing practices. They receive most of their supply at a time when the market is over-supplied; at the time when the farmer has no other outlet. The goods they receive are generally poor and the grading is poor to awful. With these conditions it is not surprising that there are complaints.

Around this time of year old barrels, crates, boxes and all kinds of containers packed with dressed turkeys and other fowl are arriving in the city markets. I have watched smaller unpack barrels of turkeys received from growers that were blue, black and discolored by heating in transit. The birds were packed before they had thoroughly cooled. Sometimes birds that were doubtless composed and unfit for food. Some of the birds are damaged by scalding, some torn in picking, others not picked clean.

Quality in Demand

All of these things detract from the appearance and lower the sale price. In many instances I believe the farmer would be further helped if he sold his small lots locally. On the other hand, there is generally good demand for fancy or really good turkeys in the city markets and they will outsell the stock from the northwest and West, but they will outsell that stock unless they are of better quality and carefully prepared for market.

Ship to reliable dealers who have a record of satisfactory dealings and not those who make bright promises of high prices. Letters quoting prices which the dealers expect to obtain for your stock should be viewed with suspicion. In the first place no man can tell you what your stock will bring until he sees it and its quality. Secondly, any man who is smart enough to predict prices several weeks in advance doesn't seem to be bothered with selling goods on commission; he would be a millionaire in no time.

A HOST of HOGS to prove a single point



A good sample pen of test hogs. They were started on test at an average of 40 pounds each. The hogs in all 9 pens received the same ration—all the corn they would eat and a ship of 3 parts wheat middlings to 1 part of meal and 1 part linseed. It was Dr. Hess Hog Special in addition to this ration that made the big difference in feeding cost and time required to reach market weight.

The point—Dr. Hess Hog Special puts hogs on the market sooner and at less cost. Number of hogs on test to prove this point—144.

NINE times over in the last two years have we had hogs on test to show in actual figures just how much Dr. Hess Hog Special cuts the feeding period and the feeding cost. In each of these tests the hogs were evenly divided into two pens. Each time one pen was fed Dr. Hess Hog Special in addition to the standard ration, the other pen was not. Otherwise the two pens were treated exactly alike. They were even litter mates in every instance.

In every one of these 9 tests the Hog Special hogs were butchered and hanging by their gambrling sticks long before their check-mates had reached market weight.

We have averaged the results so that you can see them for yourself right here on this page.

The Hog Special hogs were ready for market an average of 21 days sooner than the ones that didn't get Hog Special. They were finished for market on an average of 188 pounds less feed per hog—that's \$3.19 less cost per hog.

You can see by these actual figures what Dr. Hess Hog Special will mean to you. It will put your hogs on the market sooner and at less cost just as it did in these actual tests. It will keep your hogs in top condition, control the worms, and give them an ample supply of minerals. It will mean profit for you every time.

You can self-feed Dr. Hess Hog Special if you like—one part Hog Special to two parts middlings in the feeder. Get a supply from the local dealer or write us. Dr. Hess & Clark, Inc., Ashland, Ohio.

DR. HESS HOG SPECIAL A Conditioner and Mineral Supplement

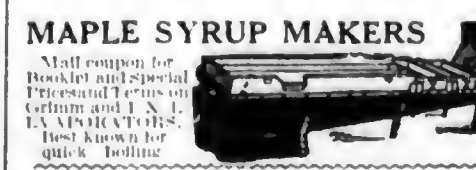


DIAMOND Drive Calk Shoes fit the average horse's hoof without alteration, or can be reshaped hot or cold.
DIAMOND Drive Calks are made from high carbon steel, hardened to give long wear. Guaranteed to fit shoe perfectly. Easily and quickly removed and replaced without resetting shoe. Give horses excellent footing when hard work is required.
Ask your Blacksmith or Dealer for Diamond Shoes and Calks. If he cannot supply you write for Illustrated Catalog to
Diamond Calk Horseshoe Company
4610 Grand Ave. Duluth, Minn.

500 MEN WANTED To sell high grade nursery stock. Part or whole time. Commission paid promptly. Reasonable prices made without loss. Salesman outfit sent free. Old retail company. THE HOME NURSERY, Box 109, GENEVA, OHIO



WITTE ENGINE WORKS
2248 Oakland Ave. Kansas City, Mo.
TIME TESTED SINCE 1870



MAPLE SYRUP MAKERS
Name _____
P. O. _____
No. Trees Tapped _____

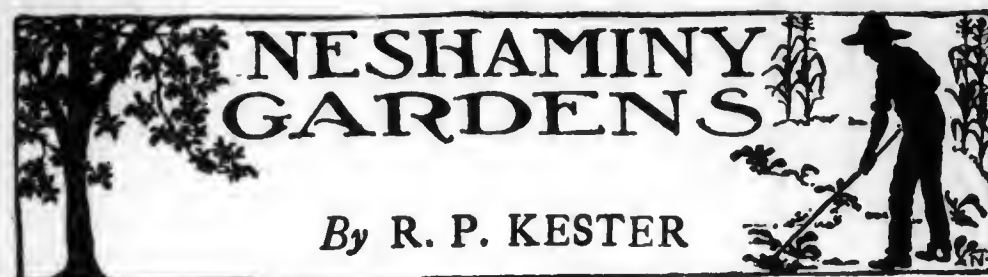


FREE HUNTING & FISHING
HUNTING & FISHING MAGAZINE, 107 Transit Bldg., Boston, Mass.



FAROUHAR SAW-MILLS
Built with Roller Bearings and Positive Geared Set Works.
Fast, Accurate Cutting
For Steam, Tractor or Gas Motor
A. B. FAROUHAR CO., Limited, Box 646, YORK, PA.

PLEASE mention Pennsylvania Farmer when writing to our advertisers. They want to know and we want them to know that you read it all.



By R. P. KESTER

I HAVE a very much esteemed friend, one who would not care for more personal mention than to call him the "Bard of Swarthmore," who writes me as follows:

"Dear Friend:—The reference to the law against stealing fruits in Neshaminy Garden notes last week recalls an incident which might be worth the telling, it being a novel way of dealing with such pilfering.

"A friend and college classmate of mine has a large fruit farm in New Jersey. One Sunday afternoon he observed in his orchard a man, the owner of a department store in a nearby city, filling a large basket with apples.

"Next morning, along the aisles of the department store, my friend was seen with a large basket helping himself to ribbons, neckties, shoe-laces, screw-drivers, etc., etc., and calmly filling his basket. When the amazed clerk reported it to the proprietor the owner hurried down the aisles; but when he recognized my friend he was good sport enough to laugh and tell him it was all right."

That is a good story and I believe it is entirely true, even to the sportsmanship of the store owner. I have been close enough to the "town mind" to know that there is a woeful lack of understanding in regard to property rights in the country. City people actually do not fully understand, and do not stop to reason it out. It would seem that there is need for city educational directors to add a branch to their school curriculum which would inculcate the truth that everything outside, as well as inside, the city limits is the property of somebody, and that property rights must be respected.

Along a somewhat similar line a reader in Franklin county, Pa., writes:

"I desire to express my approval of Mr. Kester's statements in regard to trespass on the property of others. That the game belongs to the state I cannot sanction. The hunter pays a license to the state, but only for the purpose of the protection of the game out of season. The farmer must purchase the land on which the game dwells and pay for it. He has this investment, and is subject to more or less loss of certain crops by the feeding of the game. The taxes are to pay, and his crops feed the game while it grows and becomes ready to shoot."

I agree that morally the land owner is owner of the game that is raised on his property. But legally the law vests the ownership of game in the state. This is so well established by statute that any one raising game birds or animals in confinement must have special permission from the Game Commission before he can dispose of them.

The writer of the above letter also writes in answer to my request for information about the improvements, if any, that have been made in rural social conditions since the advent of hard roads and modern schools. From his letter I quote the following:

"In response to Mr. Kester's request for a frank statement on the effect of good roads and schools on the personnel of rural communities I shall give my opinion, based on existing conditions.

"If good roads and improved schools are improving conditions in rural communities, such improvement cannot be noticed, at least in some

sections. Since we have hard roads we have more depredations of a desperate nature than before."

The writer seems to feel that the kind of education we are giving in our modern schools develops a desire to live without work, and that such desire leads people to take anything they want wherever they find it, regardless of ownership. He says:

"Education, together with God-given sense and used with proper



This is a photo of Jefferson Miner, aged 77 years, and his 37-year-old family horse, Mr. Miner, well known and successful farmer of Marshall county, W. Va., raised the horse. Who has a horse that will beat this record? C. B. Allman.

Farm Practice

By W. D. ZINN

OUR readers will recall that in a recent issue I had something to say about my grandchildren and told how Susan, who is 13 years old, had read 130 books for which I had paid her \$30. In that article I asked any one who had a grandchild that had read as many books to report. Mr. H. D. Wood of Wellsboro, Pa., writes that he has a grandson 12 years old who has read as many books as Susan. All that I have to say is that this is a remarkable boy and almost but not quite, of course, as remarkable as Susan.

In his letter Mr. Wood says, "I do not expect you to answer this letter." He certainly does not mean to deprive me of one of my great pleasures. I write from 100 to 150 letters each month and when Thanksgiving Day comes around some of the things for which I am profoundly thankful are the many kind letters I have received during the year and the probable opportunity I have had of rendering service to my fellow farmers. No matter how much money we may have laid by during the year if we have not helped folks our lives have been failures.

Contrasts

At first thought when we recall the very severe drouth that has devastated so much of our country and the fact that every farmer who had livestock to sell has lost money we are apt to think that this is one year when we have little or nothing for which to be thankful. When as farmers we contrast our condition with that of farmers in such countries as China and countries in South America we find that our gratitude should have no bounds. If we compare our condition with that of the laboring class in our large cities we cannot help feeling very thankful. In most farm homes the landers are filled to overflowing. We have enough to keep us through the winter and many

care, makes a good citizen. But when the individual feels that he is too good and too smart to do manual labor he furnishes the material for making a criminal. Somebody must work in the dust and dirt; somebody must work in the sun until he sweats. With education we must have good sense and honesty, and these things good roads and good schools are not furnishing."

I, myself, have felt for some time that this generation is expecting too much from intellectual training alone. Because of the general belief in the infallibility of our educational system, it is possible that too many parents have thrown the entire responsibility for the training of the children upon the teachers of the nation. This will never do. If the old-fashioned home disintegrates and disappears, no system of professional education will or can take its place.

ON THE COVER

IN 1921, one hundred years after the death of Justin Morgan, a statue was erected to this famous horse by the Morgan Horse Club. A picture of the statue is shown on our cover this week.

Justin Morgan was the founder of the Morgan breed. His own breeding is uncertain, but it is generally agreed that he was rich in the blood of Thoroughbreds and Arabians.

The horse got his name from his owner Justin Morgan of West Springfield, Mass. In the fall of 1785 Mr. Morgan went to Springfield to collect some money due him. Instead of the money he got a three-year-old gelding and a two-year-old colt. The colt was called Justin Morgan. It said that he could out-run, out-jump and out-pull any horse of his day. "The Morgan Horse," a booklet in the breed published by The Morgan Horse Club, 120 Broadway, N. Y., horse is described as follows:

"Justin Morgan was a dark bay with black legs, mane and tail. His high head was sharply cut; his dark eyes were prominent, lively and pleasant; his wide-set ears were small, pointed and erect; his round head was short-backed, close-ribbed and deep; his thin legs were set wide and straight, and the pasterns and shoulders were sloping; his action was straight, bold and vigorous; his style was proud, nervous and imposing. In a word, Justin Morgan was a beautiful, symmetrical, stylish, vibrant animal, renowned for looks, manners and substance. He died from an injury the age of 29—in 1921."

The blood of Justin Morgan has been of great influence in light horse breeding. Many celebrities of the track have traced to him. In the day when a horse was expected to be useful with the buggy as well as to plow those of Morgan breeding were held in high esteem by farmers. More recently the Morgan has become popular as a saddle horse for pleasure and for army use.

The School Question

HAVE been reading discussions regarding the school question in W. D. Zinn and C. B. Allman and others. I favor an equal county levy of taxation, a levy in support of schools, and the terms of school be the same in all districts of the county.

The legislature of West Virginia has placed practically all the burden of school support on the magisterial districts, which is the smallest unit of taxation in the state. This plan of taxation places 94 per cent of school costs on these districts and leaves only six per cent to the state to be levied run from \$1.66 to \$2.00 in the nine districts of Marshall county. A number of districts have months of school, while some have only eight months. I believe in giving to the taxpayers and the school pupils of Marshall county a fair and honest deal.

The cost of education has greatly increased in West Virginia. The tax has come when we must place a levy in the school systems. I believe as does my friend Mr. Allman that there should be a uniform levy system for teachers in the county. F. M. Day

Marshall county, W. Va.



MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

President - - - Arthur Copper
Vice-President - - T. D. Harman
Vice-President - George M. Slocum
Editor-in-Chief - - E. S. Bayard
Manager - - - Neff Laing

PENNSYLVANIA FARMER
Published Weekly
Established 1877

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER
Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of March 3, 1879.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Pittsburgh, Pa., November 29, 1930

No. 22

Hot Weather Hits Woods

By C. R. ANDERSON

FOREST trees on farm and wild land have suffered this year from the hot, dry days and the lack of water. Over much of Pennsylvania the results showed up even before mid-August. Browned tops stood out here and there, hanging in places to the whole tree family of the forest, so that it seemed that a fire had swept through. Large trees the roots of which had a periphery of fifty years or more to get down to where they could always get moisture fared no better than their younger and smaller neighbors, testifying to the season's severity. It is too early yet to figure just how great the loss may prove. Evergreen trees whose needles are now dead are seemingly dead to stay and can be counted; this may not be true of the deciduous trees even though their leaves looked dead early; we are not at all sure yet that some of the still living will not die; and it seems reasonable to suppose that some of those still living, but which may later fall an easier victim to insects and fungi because of the punishment undergone.

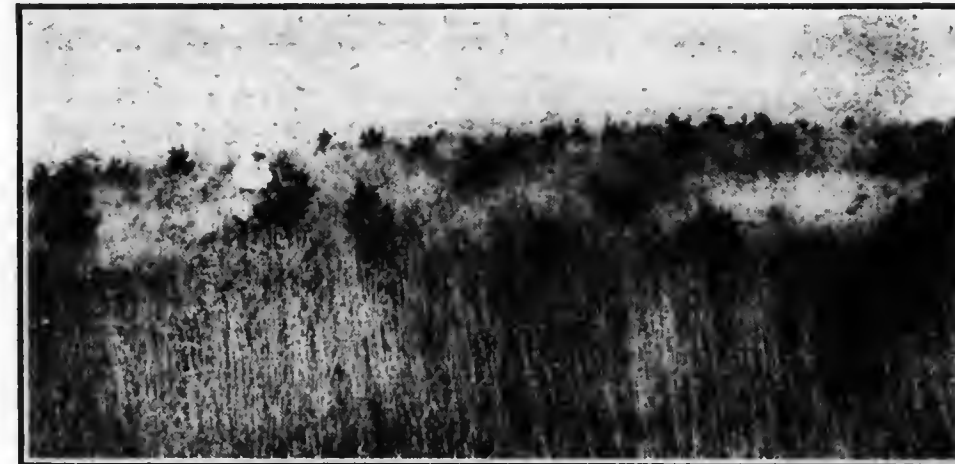
In the October number of Forest Survey, Chester A. Coover of the Pennsylvania Forest Research Institute has this to say, summarizing the findings of members of the Institute with respect to the natural woods: Hickory and white oak despite their habit of rooting deeper than other forest trees, show considerable injury; red maple shows equally as much injury, but as it is a shallow rooter this may be expected. Scarlet oak apparently surpasses all the (other) oaks in its ability to resist drouth injury, followed in order by rock, red, black, white and pin oaks. Black locust shows high resistance. . . . Among the hickories considerable variation in drouth resistance is met. Pignut hickory seems to be the most resistant, followed in order by the shellbarks, mockernut hickory; bitternut hickory is the least resistant."

There is no mention here of certain trees of the higher country in the northern part of the state, the birch and sugar maple, with their associated ash, basswood and wild cherry. These lands were in the main those best located to withstand dry weather. The beech, birch and sugar maple are all rather shallow rooted, sometimes excessively so, and it may well be that in the final effect of the drouth will be to give their deeper-rooting neighbors an advantage. A considerable amount of time must pass before we

can figure closely what has happened. A natural expectation is that the thinning process of nature will be found to have been hastened, and that more young trees have died in the thick young stands than in the usual year.

The year has proved very hard on plantings. Practically every species planted in any numbers has suffered. Personally we have seen planted trees of white pine, Norway spruce, balsam fir, Japanese larch, and even Scotch pine the height of the average man, and usually considered safe long before that time, seemingly as "dead as a door nail." But there was only one area in which the Scotch pine was found dead.

The deep-rooting kinds of trees are found to be



No. 1.—This slope lies to the south. Scotch pine planted in 1926. No loss from drouth.

dead, and all looked good. Many white pines, perhaps 500 out of 2,000 or more planted, had died. Those which died were quite evidently on the poorest spots, but at that they all seemed to have a better location than the Scotch pine.

The same story can be told many places where red pine and white pine are together on the same slope. We have found spruce plantations which were almost wiped out. One man in Bedford county, one of the counties on Secretary Hyde's freight-rate "relief" list, you will note, had a small 1929 planting of a thousand spruce which early in the spring showed better than a 90 per cent catch. Examined late in September, it showed less than ten per cent.

With spruce, however, and, we believe, to a lesser extent with larch, the problem of determining the drouth damage is made much more difficult by the freezes which occurred just around Decoration Day. These had the effect of killing all the new growth made up to that time. This resulting shock to the trees was severe; they needed favorable conditions following the frosts; these they did not get, as we well know.

As we may expect, many new plantings show a very poor survival. A few planters lost all their trees, and many have less than 25 per cent growing. But there are some who seem to have got just as good a survival as in the average year, 85 per cent or better. Careful planting did not save the plantation in every case, but it was a year in which poor planting was promptly penalized. Shallow furrowing, with the trees set in the furrow, appears to have insured a higher percentage of survival this year. Was this due to the absence of nearby weeds, or was it because the new trees were somewhat protected by the furrow?

A few of the planters who lost many of their trees are rather discouraged, and may not continue. The most, however, realize that the season was unusual, and have laid plans already to replant where the losses were so heavy as to require new trees.

We have seen that these losses are usually on the driest parts of the lands we are planning to treat. If we now have white pine on there, and the trees have died from drouth, it would seem useless to set white pine on there again. Plant a deeper rooting tree,—one which is likely to carry through. For many areas we would suggest red pine.

Low-lying, weedy areas should not be planted to red pine even though Norway spruce did fail to survive there. Give the spruce another chance, or mix larch and spruce, or next choice, white pine.

Some of the little trees now living may die yet from the effect of the dry weather, but they are not likely to do so if they are in good condition at present. Count rows at uniform intervals through the planting, as the first, sixth, eleventh. This gives a close enough basis on which to figure losses. Counting every fifth row gives only one-fifth the total loss, of course.



The opposite side of the hill shown in No. 1. White pine planted at the same time as the Scotch pine. All the foreground trees are dead, in spite of the fact that they seem to have the better location. Village of Corsica in background.

in good shape, usually. Thus red pine, Scotch pine, pitch pine, the two larches, European and Japanese, have held up much better than the shallower-rooted white pine, and the white pine in turn much better than spruce. To be sure a real comparison is complicated by differences in soil, slope and direction of exposure, whether to or away from the sun, and often by differences in the age of the plantation.

An excellent illustration lies near the village of Corsica in Jefferson county. Here a hill has been planted on all sides. The south and southwest slopes bear Scotch pine. The north and northwest were set to white pine, and the easterly slope as well (this last, however, is not as steep as the rest.) The trees have been set five years so that the larger are from four to perhaps five and a half feet in height.

Now here is how this planting shows up. At the time of our visit in mid-September, not a single Scotch pine was

Shows what young trees can stand. Land caved after removal of soft soil, planted to red pine (foreground) and black locust (background). A few red pine died, but every locust lived through the dry season.

PENNSYLVANIA FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
T. D. HARMAN, Vice-Pres. GEORGE M. SLOCUM, Vice-Pres.
NEFF LAING, Manager

EDITORIAL STAFF
E. S. BAYARD, Editor-in-Chief
C. L. WHITE, Editor
MILES HORST, Field Editor
O. W. HARRIS, Field Editor
Editorial Office: PITTSBURGH, HARRISBURG, PHILADELPHIA

Contributing Editors: R. P. Kester, Alva Agee, L. W. Lighty, W. D. Zinn,
R. U. Hildemann, J. F. Shuler, F. L. Bentley, J. C. Lipman,
S. W. Fletcher, H. C. Knandel, A. A. Borland,
R. L. Scharring-Hausen, Gilbert S. Watts,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR.
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each inser-
tion. Minimum space 5 lines. Special rates on application for
livestock and classified advertising. No deceptive, immoral or
swindling advertisement inserted at any price.
Member Agricultural Publishers' Association,
Audit Bureau of Circulations.

Volume 103, No. 22 Established 1877

LARGE ENTRIES

ENTRIES in the carlot show of fat cattle at the International Livestock Exposition are beyond expectations, more than 200 carloads. This is a great record for a year of short feed crops. Let us remind the reader again that the International opens the last of this week and runs through next week.

A RUSSIAN FARMER

A KANSAS farmer reports that some of his relatives in Russia, to whom he has sent "many American dollars to keep them from starving," have had everything taken from them and have been sent to Siberia to work in the timber. "They get one and one-half pounds of rye bread per day and are not allowed to buy clothes or even to write to us." Commenting on which the editor of the Kansas City Star, who spent several months in Russia this year, says: "The situation described is entirely correct as applied to the better class of individual farmers who have not been willing to enter into collective or communistic farming. Their property has been confiscated by the Soviet government and they are frequently unable to adapt themselves to the new system. This results either in banishment to Siberia, or if they are particularly aggressive in their objections they are shot as traitors to the government." And yet some weak-kneed Americans are in favor of recognizing a government which daily violates fundamental human rights.

THE NEGLECTED HORSE

A CORRESPONDENT complains that the agricultural press is neglecting the horse. So far as this paper is concerned the charge is not correct. But the horsemen of the country, who have a financial interest in the horse, are guilty of neglecting him. Where are all those who used to write about breeding, rearing, feeding, care and use of horses? Are horsemen all afflicted with writer's cramp? If they don't even try to tell the world something about horses they shouldn't criticize the humble hayseed editor who does try, at least now and then. Our critic assures us that the horse is still in use. So he is, and likely to be for many a year. Right here and now in Pennsylvania there are sixteen colt clubs, with over 200 colts enrolled and as many boys interested in developing them. And this lone fact is more horse information than all the horsemen have sent us in several moons. When the friends of the horse quit

acting like a hibernating bear with rheumatism they will get more horse material in the agricultural press.

WHEAT PROPHECY

THIRTY years ago an eminent English scientist, Sir William Crookes, predicted a world wheat shortage by 1931. He thought that the world's wheat area could be increased only 100 million acres and figured that this would not be enough to feed the growing population. He did not foresee the contributions of science to wheat production, the introduction of power machinery or the use of land for wheat that was then thought suitable only for grazing. The world now produces 40 per cent more wheat than in 1900, while the earth's population has increased but 20 per cent since the beginning of the century. The average increase in yield of 1.4 bushels per acre accounts for an increase in production of some half billion bushels, while the decrease in per capita consumption in this country alone adds another 148 million bushels to the available world supply. This prophecy, like most others, is of value chiefly in drawing attention to the fact that we do not know what the future will bring forth.

FED ON WHEAT

LAST week the Illinois Experiment Station sold its wheat-fed steers and figured out the results. Five lots were fed for 90 days, one on straight shelled corn and the others on different combinations of wheat, corn and oats. All the cattle got the same amount and kind of hay and the same amount of cottonseed meal. The lot fed on coarse-ground wheat and oats, half and half, made the cheapest gain and sold as high as any. Bought at \$7.05 per cwt. and sold at \$9.70 these cattle made a profit of \$13.08 per head and paid \$1.19 per bushel for wheat and 63c per bushel for oats. The corn-fed cattle made a profit of \$1.43 per head, paying 84c for their corn. A combination of ground wheat and shelled corn was more profitable than straight corn, and so was every other combination in which wheat figured. Other wheat-fed cattle appeared at Chicago last week, one carload topping the market for their weight. They were fed a mixture of corn, wheat and barley and the feeder thought they paid 25@30c above the market for the wheat they ate. Wheat-fed hogs are common these days and satisfactory to slaughterers.

HEPSY NEFF

THIRTY years ago The Stockman and Farmer received a manuscript entitled "The Chronicles of Hepsy Neff." It was the diary of a woman who left her city school work to go back home and operate the farm on which she was born, there to care for her father, alone and a paralytic. The story was so good, carried with it so much of sane philosophy as well as of human interest, that readers demanded more. They got it in "The Chronicles of Hepsy and Jonathan," for Hepsy had found a life companion while she was struggling with her farm problem. This was followed by an insistent demand for regular contributions, so in due time Hepsy Neff became our Household Editor. She continued in that work until this year, when she asked to be relieved of regular duty but promised an occasional contribution. Two weeks ago we wrote to her about a contribution for a later issue, but our letter came back with the information that she had passed from all earthly activities.

Hepsy Neff was Mrs. Ina M. Slusser, wife of the late Judge Slusser, formerly of Chicago and later of Eureka Springs, Arkansas, where

he died a few years ago. She was born and reared on an Ohio farm and was familiar with all kinds of farm work, all phases of life. She believed in the farm, particularly its opportunity for the building of character in boys and girls. "To make the children today and tomorrow better, stronger and happier than the children of yesterday—this makes life worth living." So she said and she lived, for her life was devoted to children, not merely her own but all children. She was a consistent advocate of the domestic emancipation of women, emancipation from the actions of fashion or custom, from the work which so often stands in the way of higher things. And she was a constant advocate and exemplar of these higher things. Our old readers, all who knew her life and work, will join us as we lay this humble wreath on her grave.

INCREASING THE PILE

THE Grain Stabilization Corporation course in buying more wheat on a market is commended by those who see it merely an attempt to help the market at a time when it needs support. If the Corporation is going to pile up wheat it should do so when the price is low, but the wisdom of such action is questionable. The wheat market is what it is largely because of attempts in Canada and this country to stabilize it artificially. The policy of the Canadian pool and of our official agency has resulted in a vast accumulation which everybody knows must be sold sometime and which is a constant weight on the market. Whether additions to this weight can be matters in the long run is a question nobody can answer. Probably it cannot unless some crop reverse or other calamity production declines and the price advances, allowing the accumulation to be absorbed. Thus our experiment in stabilization has been a costly failure, and in the end all such effort will be found to cost more than they are worth. The world's experience has shown that the best corrective of a surplus is a price that will cause it to be used; that the best corrective of a deficiency is a price that will promote increase in production and economy in use; and that the wisest plan is not monkey with either high or low prices but to allow the market to take its course.

THE NATIONAL GRANGE

AMONG the national and international problems acted on at the recent meeting of the National Grange were stabilization, currency, Federal Reserve banking and Philippine independence. Many others might be named, for the Grange officers appeared to tackle any question, no matter how profound. Interest in such current affairs is commendable, but is there not grave danger of Grange leaders misdirecting their energies? The source of strength of the National Grange is the Grange hall at the community cross-roads. What goes on there determines whether the Grange shall prosper or decline. The national officers' action on highly complicated economic problems has little to do with it.

Along with many other patrons, we believe that the Grange's greatest opportunity and its greatest duty is to foster a healthy, attractive and progressive community among farm people. It can speak and act with undisputed authority on the problems of the farm home and community. Its opportunity for constructive achievement in the field is unique and almost unlimited. Recognizing this opportunity, and their peculiar fitness to meet it, we regret any tendency of Grange leaders to neglect this obligation in favor of matters which mean more newspaper headlines but less genuine helpfulness to members back home.

New Jersey Farm Comment

By G. W. HARRIS



Coal Shoveling Time Again Is Here

THE New Jersey League of Women Voters are holding a New Jersey farmers' and consumers' marketing conference at the College of Agriculture on December 12. The object of this meeting is to create a better consumer's interest in marketing.

JOBLESS men have been selling apples on the streets of New York City for several weeks. The city has been cooperating in this move to assist the unemployed, and up to the present time this temporary relief measure has been reported as successful.

Now other cities are giving the apple eating

ities where they are to be sold. Should this move become effective it will not only help to relieve the large supply of New Jersey apples, but will also make the public conscious of quality in New Jersey apples.

TWENTY-EIGHT young Hereford cows and heifers from the herd of J. W. Jones, Montgomery county, Maryland, have just been purchased by Lord Fairfax, of London, to be placed on the latter's 800-acre estate "Northampton," Prince Georges county, Maryland. It is reported by K. A. Clark, specialist in animal husbandry.

Sixty-Fourth Session of National Grange

BLESSED with many notable speakers, with countless columns of front page newspaper space, with harmony within the order and with the largest Seventh Degree class ever initiated, the National Grange held the most successful meeting of its history at Rochester, New York, November 12 to 21. The largest of the State Granges was host.

Months of intensive preparation by the New York officers came to a grand climax on the opening days of the session when about 20,000 patrons appeared in Rochester. More than eleven thousand presented themselves to receive the Seventh and highest degree of the Order. Most of the candidates came from nearby Granges, but nearly six hundred were from Pennsylvania, over fifty from New Jersey and smaller numbers from other states.

Governor Roosevelt of New York was one of the Seventh Degree candidates and one of the speakers of the opening sessions. United States Secretary of Agriculture Arthur M. Hyde made a plea for farmers to organize so that crop surpluses may be prevented by systematic control of production. He painted a dark picture of millions of American farmers engaged in destructive competition with each other. He made it seem highly desirable that they bind themselves together for "unity of action, collective thinking, planning and marketing" so it may be said: "Here is a body which speaks for most of the six million farmers in the United States and wields their collective power."

In Defense of Farm Board

Vice-chairman James C. Stone of the Federal Farm Board apparently sensed the dissatisfaction of some of the Middle Western delegates with the Board's failure to stem receding prices. Although any record of this feeling was carefully kept out of the official proceedings, Mr. Stone devoted some time to a denial that the Farm Board caused the crash in grain prices. He wanted it understood

that the Farm Marketing Act was not passed as a temporary, emergency "farm relief" measure. Rather, the Act which created the Farm Board provides for "a long-time program, something that will lead to the permanent betterment of agriculture."

Other prominent speakers of the early sessions of the Grange's ten-day convention were the heads of the principal national cooperative marketing organizations and, of course, National Master L. J. Taber whose annual address was discussed last week.

National Problems

After the crowds of the spectacular opening days had melted away, the working members of the National Grange took a day off to visit Niagara Falls. Then they settled down to work. Each of the thirty-two Grange states was officially represented by the State Master and his wife. This small body, with the national officers, constitutes the final authority of this national order of almost a million members. National Grange policy is here determined by the approval or rejection of the resolutions which come in from almost every source within the Grange.

There has been little change in the National Grange's attitude on national problems since last year's meeting. As expected, it reaffirmed its stand in favor of an export debenture on farm products. In spite of the under-currents of adverse sentiment, the Farm Board was commended for its efforts; unofficially it would appear that the Grange is adopting a give-the-Farm-Board-another-chance attitude, and at the same time the Board is being reminded of the additional support promised the debenture plan in Congress; the Board had better produce results or the Grange will produce the debenture scheme.

As the National Master's address foretold, a resolution was passed condemning short selling exchange (Continued on page 17.)

Lessons from European Pasture Management

By J. B. ABBOTT

I SPENT the latter part of May, all of June and the first few days of July in Germany, Holland, England, Scotland and Wales studying their methods of pasture management. I did not confine my investigation exclusively to the work of the experiment stations but went out also onto the farms of some 25 or 30 representative successful farmers in those countries and talked with the farmers themselves.

I want to state the most significant fact of all right at the outset, namely that I saw thousands of acres of pasture land each acre of which regularly yields a net profit equaling or exceeding the gross value of an average acre of American silage corn or hay. And that such results are due primarily to adequate fertilization and skillful pasture management rather than, as sometimes assumed, to more favorable climatic conditions for grass, and that they can be obtained here as well as in Europe is pretty clearly indicated by the results of an experiment in intensive pasture management conducted at the Massachusetts Experiment Station and reported in their bulletin No. 262 "Intensive Grassland Management" in which they reported net returns from grazing land running as high as \$50 per acre. I saw nothing much better than that abroad.

That it is profitable to have such pasture, even at a considerable cost, and thus maintain production at a high level throughout the summer and at the same time reduce or eliminate the mangel feeding of hay, silage, soiling crops and concentrates during the normal grazing season seems to me to be a self-evident fact. Each acre of such pasture yields a larger profit than the land would yield in any feed crop for mangel feeding, a great deal of labor is saved as compared with mangel feeding and the cows certainly seem to produce as well or better. Admitting the desirability of such pasture, the question is how to get it.

On Good Land

In traveling by train and automobile the length and breadth of the countries which I visited, several thousand miles altogether, I did not see a single high class milking herd or bunch of fattening steers on really poor land. Frankly I could see little fundamental distinction, other than use, between so-called arable land (land used for crops and hay) and permanent grass land used for grazing. The one appeared to be as fertile and about as suitable for tillage as the other so far as I could see.

Of course there is a lot of very poor land in the countries which I visited, the same as there is here; but the Europeans appear to have learned better than to let their high producing dairy cows and fattening steers wear themselves out racing over it in the vain hope of finding enough to eat. Instead they graze it with some animals with a relatively low energy requirement such as, for example, the hardier breeds of sheep, or use it for forest. So far as I could learn little or no effort is ever made to improve such pastures, European experience having been that it pays better to put such effort and expenditure into the better and

more responsive soil.

The contrast between European pasture practice and practice in the Hay and Pasture Belt of America is very striking. Here, for one reason or another, it has become customary to use for arable land about everything which isn't either steep enough to tip a smoothing harrow over or so rocky that the ledge comes up to the second rail of the fence, and expect the cows to find a summer living on the rest of it. I suspect that that practice is in part a heritage from pioneer days when it was a real problem to get rid of the forest and get sufficient acreage or arable land to provide sustenance for the winter, and in part a natural development of agriculture in a country containing a relatively large percentage of non-arable land; but whatever the historic reason, times and conditions have changed and current farm practice lags behind and is not in good adjustment.

As I see the problem the dominant factors which are rendering a readjustment of farm practice im-



In the foreground is an untreated grass plot; in the background, a complete fertilizer plot, where Dr. H. Wurmhold did pioneering work in intensive grassland fertilization at Hohenheim, Germany.

perative are, first, exhaustion of the virgin fertility of our present permanent pastures, second, the fact that a large portion of our present so-called pasture land is poor, unproductive land at best, third, the fact that cows have been bred up to a production which requires a great deal of feed and precludes the expenditure of too much energy in getting it, fourth, the fact that it costs more than ever before to feed a cow in the mangel and, fifth, the fact that we have a surplus of arable land, especially hay land, some of which might be devoted to grazing without causing any serious crop shortage.

Taking all these factors into consideration and in the light of current European practice I am inclined to the opinion that the next few years will see the virtual abandonment of hundreds of thousands of acres of the poorer portions of our present pastures together with the improvement of the better portions and addition to the grazing land of enough of our present arable land to provide sufficient grazing. Such a change in land utilization I believe to be clearly indicated and it is to be expected that those farmers who make the readjustment first will benefit to the greatest extent.

I did not talk with a single European farm-



A high-producing herd in the intensively fertilized pasture of Mr. Herman Jones, Holtensau, Schleswig-Holstein.

er who expected to get along without regularly doing something to enrich his pasture land. Some farmers use liquid manure (an infernally nasty job and apparently not effective enough to warrant recommending it), others use manure, others use chemical fertilizer and still others, especially in parts of Germany, use both manure and chemical fertilizer.

Every one with whom I talked—scientists, fertilizer men and farmers—was of the opinion that phosphatic fertilization is the one absolutely indispensable treatment which cannot be omitted without utter ruin of the pasture—the sort of a thing like nailing on a loose board now and then or setting a few new fence posts, which may not be particularly profitable in themselves but which simply have to be done in order to avoid a heavy loss.

The pioneer pasture fertilization investigations of Dr. Sir William Somerville at the Northumberland County Experiment Station at Cockle Park in England, which were begun in 1857 and which are still carried on, are entitled to a great deal of the credit for calling public attention to the importance of phosphatic fertilization of grazing land. I spent a day at Cockle Park and was especially fortunate in having Mr. N. P. S. C. Armstrong, the farm steward, as guide to the plots.

Lessons from Poor Pasture

In the words of their bulletin No. 42 "The large area of what was very poor pasture, lying chiefly on poor stiff boulder clay, has proved to be excellent for investigations on how to improve poor pasture and meadow land lying on such a soil, while there is sufficient of the same lying on poor sandy soils to show that distinctly different manurial treatment from the foregoing is needed on these latter soils."

"On the great bulk of poor pastures on the heavy soils of Northumberland, basic slag is a most effective manure for economic improvement, and on the lighter soils, the same manure, along with a potash manure, has also been found to be most effective. The question has also been settled that second and even up to eighth dressings of slag are quite as effective as first dressings. Mineral phosphates, ground slag are now acting quite comparably with basic slag. The after effects of feeding cake (concentrates) on grazing stock have not proved as satisfactory as was expected."

In view of the fact that the Cockle Park experiments have been cited by some agricultural writers as proving that nothing other than phosphatic fertilizer gives profitable results on grazing land it is worth noting in passing that the investigators at Cockle Park draw no such conclusions themselves but on the other hand state quite explicitly that lighter types of soil respond to potash also.

Their conclusion is in accord with the results secured in the most extensive series of tests yet reported in America—over 100 tests in the northeastern states and the province of Ontario conducted during the season of 1929 and reported by The National Fertilizer Association—which demonstrated a rather general response to potash and a universal response in addition to the expected phosphoric acid response.

Tree field at Cockle Park, the oldest of the pasture tests, consists of eleven differently treated plots of three and one-twentieth acres each. The soil of this field is poor and very stiff and heavy and lies on boulder clay. An attempt is made to measure the response to treatment by grazing each plot separately with yearling sheep and recording the increased weights; but this scheme, as will be pointed out later, is not so simple as it looks now.

(Continued on page 14)

John Imberley, Trustee

By Homer Green

Copyright, 1930, by Perry Mason Company, Boston, Mass.

SYNOPSIS

There is a deep mystery about the trust under which John Imberley, president of the Citizens' Bank of Brierly, is acting as trustee. The creation and conditions of the trust and the beneficiaries are matters of which Mr. Imberley alone appears to have any knowledge. Mrs. Leighton, a widow, and her lame son, Robert, have just left Mr. Imberley's office after an unsuccessful plea to have an extension of time on the long over-due mortgage on the farm. Mr. Imberley has flatly refused their request but seems interested in Robert and also in Rafe Orchard's neighboring farm and makes inquiries concerning both farms. Robert and his mother have tried without success to borrow money to save their home. A few days later they receive a letter from John Imberley offering Robert a position in the bank and granting an extension of time on the mortgage.

"So we are going to give you an opportunity to do better. We intend to open a savings department, which will gradually supersede the interest certificate system, and we have decided to place you in charge of the books of that department if it is agreeable to you."

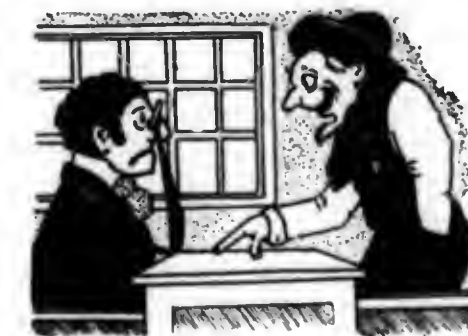
This was so great an advance that Robert was fairly stunned by the announcement. For the moment he could not speak, and when he did find words with which to express his pleasure at the promotion and his gratitude for the confidence which the officers of the bank placed in him, he felt that he was doing it very awkwardly and brokenly. But he was very glad, of course, to accept the new position.

Mr. Imberley then went on to explain to him, at some length, the proposed system, the theory and details of which Robert grasped readily.

"We shall open the department the first of October," the president added, "and from that date we have decided to pay you fifty dollars a month, instead of the thirty-five you are now receiving. As the department grows in importance, if you do well with it, we shall expect to increase your salary still more."

Fifty dollars a month was not a princely income, to be sure, but to this farmer's lad, trained to the practice of severe economies, it looked like a fortune.

The Cheerful Plowman



LAMENTATIONS DO NOT HELP

I REALIZE that times are hard, but what is gained by sweating hard? In all my ninety-seven years I've known no flood of salted tears to irrigate the business field sufficiently to make it yield! I've never known a wailing breeze to fill that field with fruited trees, in fact the hot winds of distress when turned loose in their wantonness disperse the clouds that carry rain and dwarf the fruit trees that remain. We cannot help to shoo away depression as it's felt today by letting mouth-ends sag and wilt with sad and pessimistic tilt.

I realize that times are slow, my bank account is rather low, I am not raking in the jack as I did seven summers back; I sell my wheat for less, I see, than I did back in '23; my oats are market drugs, 'tis true, the price of plums is thin and blue. I realize this dull report cannot make any man envious; I realize no man can say, "I'm glad I'm losing out today! I'm glad my land is down in price, for nip-and-tuck is sweet and nice." It is not common sense to sing when bank accounts are on the wing.

Yet, circumstances are, I vow, just as they are, right here and now, and every pessimistic wail that we shoot out across the vale will have a tendency of course to keep depression long in force. The more we talk hard times, by heck, the harder they will grip the neck; the more we moan the more we may, the more we cry, "Alack, the day!" the longer we will wait in vain for Old Good Time's incoming train. An optimistic tone of voice, in accents cheerful, chele and choice, will do more toward improving things than all new plans of courts and kings.

J. E. T.

Late in the winter Rafe Orchard was taken suddenly and severely ill. Doctor Wheatcraft of Broad Valley, who had known Rafe for many years, and appreciated him, and who had spent many leisure hours with him at the cottage, gave the case careful and constant attention.

June was tireless in her ministrations, and Mrs. Leighton, remembering the anxious and sorrowful days of her husband's illness, when Rafe Orchard was like a good angel to them, gave June the assistance of her hands and the benefit of her experience by day, and watched with the sick man many a weary hour at night, while June closed her tired eyes for a little broken sleep.

It was nearly a week after the attack that Robert, coming home to stay over Sunday, first learned of his friend's illness.

When he returned to the bank on Monday morning, and passed the open door of the president's room, he saw Margaret Imberley sitting with her father, and stopped to tell her of Rafe's illness.

JOHN IMBERLEY looked up anxiously. "How sick is he?" he inquired.

"Very sick, I think," replied Robert. "It's pneumonia. Doctor Wheatcraft is not discouraged about him, however. He says it is just an ordinary severe case."

"Is Wheatcraft a good doctor?"

"The best in that section, and a great friend of Rafe's."

Mr. Imberley turned to Margaret. "You must have James drive you over there this afternoon," he said, "and take over such things as you think they may need—food, fruit, clothing, anything. Ask your mother what to take. See what June wants in the way of help. Tell her to spare no expense in making her father comfortable and restoring him to health. I shall be glad to meet all bills on that account, and then it will be but a drop in the bucket to what I owe him. I haven't forgotten about—about the runaway."

When Margaret returned from Broad Valley that evening both her father and Robert were at the door, awaiting her arrival. But she brought them no encouraging news. Double pneumonia had developed, and there were symptoms of typhoid fever. Doctor Wheatcraft was very anxious.

"June cried when I gave her the message you sent, papa; then she dashed her tears away and told me to tell you you were an angel. And so you are! She says it's the way her father talks in his delirium that hurts her most. And it's so strange. He doesn't say anything about farming, or music, or books, or pictures, or things like that, with which he is familiar; but he seems always to be talking about some kind of corporation stocks, trying to buy or to sell, and he thinks no one will listen to him, and it worries and exhausts him so."

The president of the bank spent the next forenoon looking over the books and examining the papers relating to the account of "John Imberley, Trustee."

In the afternoon he called Robert into his room. "Do you care," he inquired, "to spend the balance of your afternoon after banking hours in doing some extra work for me, for which, of course, you will receive extra compensation?"

"I shall be very glad to do any extra work," replied Robert.

"Very well. You are familiar, in a general way, with the account of 'John Imberley, Trustee,' as it stands on the books of the bank. Now the bank balance is but a small part of the funds in my hands as trustee. The moneys have been invested and reinvested in a variety of securities, and the trust has continued through a good many years. I have personally kept all the books and accounts relating to it. What I desire to do now, in view of a possible determination of the trust, is to make an analysis of my accounts from the beginning. I wish to classify them and verify them. In short, I want a complete, condensed and tabulated statement of the conduct of this fund since it has been in my hands. You are perfectly competent to do the work. I will furnish you with the necessary books and data. It will occupy as much of your time as you can give to it for perhaps two weeks."

Robert expressed his complete willingness to undertake the task and to begin that day.

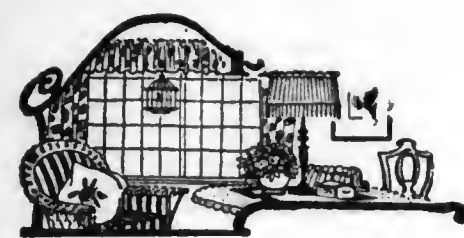
"Of course it is not necessary for me to say to you," added Mr. Imberley, "that the information which you will obtain in this matter is to be held by you in the strictest confidence."

At four o'clock that afternoon Robert began his task. For the first hour Mr. Imberley remained with him, and gave him such information and explanation as seemed to be called for. But the boy took hold of the matter readily and intelligently, and after that day it was not necessary for him to seek the assistance of the trustee except in one instance. That was some ten days later.

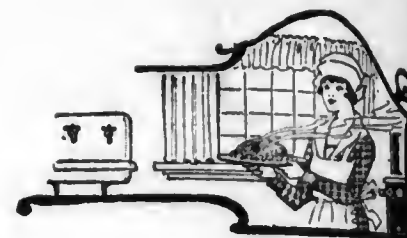
(To be continued.)



An English pasture which has been well grazed and is now resting and making a good recovery. Note entire freedom from weeds and tall stony grass. This is on the farm of Mr. W. Brunton, Tollesby Farm, Marton, near Middleborough, England.



The Farm Home



Canning Ideas

A BRIDE of just a year has made quite a hit with "dear husband" with her pumpkin pies all the year around, and suggests that farm women watch the golden pile of pie timber, and cold pack at least a few jars of delicious pumpkin. These spicy desserts are just as good in April and May as at Thanksgiving time. (And eggs are more plentiful and so much cheaper.)

The pie recipe calls for one quart cooked strained pumpkin, two cups sugar, two tablespoons melted butter, one teaspoon cinnamon, one teaspoon ginger, three eggs—yolks and whites beaten separately, one quart rich top milk, salt.

Mix well the first five ingredients sifting the spices with the sugar. Add the beaten egg yolks—then the milk. Then fold into the mixture the stiffly beaten egg whites. This method not only makes a lighter pie custard, but gives a crisp attractive top to the pie that is most delicious. This recipe fills two large crusts.

Our good friend did not send directions for canning the pumpkin, but we will add that information. If your storage place is not so that pumpkins keep well into the spring months, then canning is advisable. Cut the pumpkin in small pieces, cook until tender, then mash and pack into hot jars. Add but enough water in the cooking to prevent scorching, and let extra moisture steam away when the pieces are tender, otherwise you lose valuable minerals in the water thrown away. Add one half teaspoon salt to each quart of mashed pumpkin. Process three hours in the water bath, or forty minutes in the pressure cooker at ten pounds.

Mrs. Isaac P. Eshleman, one of our Pennsylvania readers sent in a big help in canning ideas recently, and you should tuck it away with your notes on canning for next year if the situation fits into your own home equipment.

She lives on a one hundred acre farm and has from eight to ten at her table the year round, so saving time has become one of her hobbies. She reads our Home Pages with interest but has never seen this plan in print and feels sure it might be helpful.

All in the Day's Work

Mrs. Eshleman has neither gas nor electricity, but has a laundry furnace where she burns thick chunks of wood. This kind of fire needs little attention after once started. Two large iron kettles sit on this furnace and hold thirty-six one quart jars. She made the racks herself by sawing off short bits from the tops of apple baskets.

This "Pennsylvania Farmer Booster" (as she calls herself) cold packs all her meats at butchering time and has never lost a can. Last year she had on her shelves nine hundred jars of fruits, vegetables and meats. One day in July this summer she canned three and one-half bushels of string beans, one bushel of beets and one bushel of carrots—think of that for just one day.

Butchering time is here for many and near for others. If you have not had our two helpful bulletins on curing and canning meats, send for them today. They are full of help in both methods and recipes for this important autumn work. Free for the asking, if you send a self-addressed stamped envelope with your request to Home Department, Pennsylvania Farmer, 7301 Penn Avenue, Pittsburgh, Pa. G. S. S.

The Flower Market

DURING the past decade the gladioli, dahlias and tulip markets have overshadowed all others for the professional and the amateur alike, according to the sights one sees in going over the country. Of course other flowers are sold, but people seem wild about the three varieties named.

But during the past season mari-



We farm women who have "gunners" among our men folk will welcome these timely rabbit recipes sent through the courtesy of the U. S. Bureau of Biological Survey and Home Economics.

golds, zinnias, snap dragon, daffodils, golden glow and others were in use perhaps because they came so much cheaper. A dozen zinnias for twenty-five cents rivalled the gorgeous gladioli at much higher rates when the purse was low. But another flower came into great prominence and that was the everlasting, or old time straw flower. My niece raised and sold thousands of these beauties finding a ready market for them at twenty-five cents per dozen. They were beautiful and she could not supply the demand. Personally I am glad to see the good old fashioned garden flowers coming back, so if hard times are responsible there are at least compensations in the way of giving the old favorites a fair show.

Hilda Richmond



Dressed-up Tapioca Makes Delicious Desserts

New Kitchen Magic

EVERY successful cook uses one ingredient which has never been included in any cook book recipe. It is "a dash of imagination." Luckily this precious ingredient is available to every homemaker, whether she has an unlimited food allowance or whether she must count every penny.

For instance, a "dash of imagination" will turn plain tapioca cream into a dozen new, delicious and economical desserts which the family will hail as a special treat.

And what a time saver. Make up enough tapioca cream for two days' dinners. Serve it plain one day and dressed up for the next day.

First of all, here is the basic recipe:

Tapioca Cream

One-third cup quick cooking tapioca, one-half cup sugar, one-fourth teaspoon salt, one quart milk, scalded, one egg yolk, slightly beaten, two teaspoons flavoring, one egg white stiffly beaten.

Add tapioca, sugar and salt to milk. Cook in double boiler 15 minutes or until tapioca is clear, stirring often.

Pour small amount of tapioca mixture over egg yolk, stirring vigorously. Return to double boiler. Cook until thickened. Remove from fire. Add flavoring. Fold in egg white. Chill. Serve in sherbet glasses. Garnish with whipped cream and a few berries or pieces of fruit. Serves eight.

Surprise Desserts

Serve with chocolate, or caramel sauce or maple syrup. These may be folded into pudding or poured over each serving and garnished with nut meats.

Serve with a fig sauce made of stewed dried figs, chopped. Fold whipped cream into pudding. Garnish with orange or grapefruit sections, with jam or jelly, or with a fruit sauce or canned fruit syrup.

Fold in whipped cream. Garnish with fluffy chocolate sauce. (Whipped cream and chocolate sauce folded together.)

In addition to these suggestions every woman will be able to add some of her own, such as shredded coconut, candied fruits, canned fruits.

Rabbit Dishes

INCREASING interest in the domestic rabbit as meat has led to the development of cooking recipes, which have been worked out by the Bureau of Home Economics of the U. S. Department of Agriculture. The Bureau of Biological Survey is also interested in encouraging the raising of domestic rabbits, and explains that hutch-raised rabbits are quite different in flavor from wild ones because of the nature of their food. They are raised in small hutches or on fur farms under sanitary conditions, and eat mainly rolled cereals, alfalfa hay, and leafy vegetables. In the West, particularly in California, domestic rabbits are widely known and used, but in the Eastern States the housewife often has yet to make their acquaintance.

The flavor of the meat is very much like chicken. The methods used for cooking chicken can be applied to domestic rabbits—that is, young, tender animals may be quickly cooked by frying, broiling or smothering, while older, heavier rabbits require slow moist cooking to make the muscles tender. They may be used for short orders if parboiled whole and then cut in pieces dipped in batter, and fried. Or they may be simmered and served with dumplings as a fricassee or stew, or put into a rabbit pie, or browned and baked in a casserole until tender. Attention may well be called to the unusually good flavor of the liver of domestic rabbits. It is mild, sweet, and very tender.

To cook a large rabbit in a casserole, cut it into pieces of suitable size for serving, sprinkle with salt and pepper, dredge with flour, and brown in fat. Transfer to the baking dish, on a rack, add a small quantity of water, cover closely, and cook until tender in a moderate oven. Remove the cover toward the last so as to brown the top pieces.

Rabbit pie is also made in a baking dish, but a pastry crust is used instead of the lid of the dish. As the pie should only be baked until the crust is done, the rabbit is first simmered in a saucepan until tender and then the meat is removed from the bones.

Rabbit Pie

Cut the rabbit into two or three pieces, place in a saucepan, barely cover with water, cover the pan, and simmer until tender. Drain and measure the liquid and remove the meat from the bones in large pieces. Heat two tablespoons butter or other fat in a heavy skillet, add a small green pepper chopped, a small onion chopped, and two tablespoons chopped celery, and cook for a few minutes, stirring frequently. To each cup of liquid use one and one-half tablespoons flour, and mix well with the fat and seasonings. Add the liquid and stir until thickened, add salt to taste, and a dash of tabasco sauce. Mix well with the rabbit meat and pour into a baking dish. Cover with a pastry crust and bake in a moderate oven until the crust is golden brown.

What They Don't Know

HOW often we hear mothers say that their children do not eat raw vegetables. Somehow the boy who will whittle away at a turnip for the field and think it delicious will turn up his nose at raw vegetables served on the table. However there are ways of even pleasing children with their fancied dislikes.

For example one mother serves gelatin salad with grated carrot, pineapple, tomato, and celery, and the boy who will whittle away at a turnip for the field and think it delicious will turn up his nose at raw vegetables served on the table. However there are ways of even pleasing children with their fancied dislikes.

Mrs. W. C. K.



Dresses--Smocks--Toys

No. 7023—Ladies' dress. Designed in sizes: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 4 1/2 yards of 36-inch material. For contrasting material 1-3 yard is required. Price 15c or two for 25c.

No. 7027—Ladies' suit. Designed in sizes: 34, 36, 38, 40 and 42 inches bust measure. To make the suit in a 38-inch size requires 5 1/2 yards of 36-inch material. To line coat and collar requires 2 1/2 yards of 36-inch material. Price 15c or two for 25c.

No. 7029—Misses' dress. Designed in sizes: 16, 18 and 20 years. A 16-year size requires 4 1/2 yards 39 inches wide. For contrasting material 4 1/2 yards 39 inches wide is required. Price 15c or two for 25c.

No. 7032—Ladies' house dress. Designed in sizes: 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size with sleeves requires 3 1/2 yards of 36-inch material. Price 15c or two for 25c.

No. 7037—Girls' dress. Cut in five sizes: 1, 2, 3, 4 and 5 years. A 2-year size with short sleeves requires 1 1/2 yards 35 inches wide. With full sleeves 1 1/2 yards will be required. To trim as illustrated requires 3 yards of banding (or insertion) and 2 1/2 yards of edging. Price 15c or two for 25c.

No. 7042—Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. A 6-year size, without sleeves, requires 1 1/2 yards of 36-inch material. With bishop sleeves 2 1/2 yards will be required. With full sleeves 2 1/2 yards will be required. Bow and ends require 1-2 3/4 yards of ribbon. Price 15c or two for 25c.

No. 6265—Girls' night drawers. Cut in 6 sizes: 2, 4, 6, 8, 10 and 12 years. A 6-year size in ankle length requires 3 1/2 yards of 27-inch material together with 3/4 yard of contrasting material. If made in knee length 3/4 yard less of the figured material will be required. Price 15c or two for 25c.

No. 6355—Girls' dress. Cut in four sizes: 6 months, 1, 2 and 3 years. A 2-year size requires 1 1/2 yards of 36-inch material. For pockets and facing of contrasting material on collar and cuffs 1/4 yard 27 inches wide is required. Price 15c or two for 25c.

No. 6545—Ladies' morning frock. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size with long sleeves, requires 4 1/2 yards of material 35 inches wide. With short sleeves 4 1/2 yards will be required. Frock is 1 1/2 yards. Price 15c or two for 25c.

No. 6039—Girls' undergarment. Cut in four sizes: 8, 10, 12 and 14 years. A 12-year size requires 1 1/2 yards of 32-inch material for the underbody. If made with shaped shoulders or 1/4 yard if made with camisole top and 1 yard of 36-inch material for the bloomers. The panties will require 3/4 yard. Price 15c or two for 25c.

No. 6863—Ladies' pajamas. Cut in 4 sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 3 1/2 yards of material 35 inches wide. A slash of ribbon requires 2-3 yards. To finish with bias binding requires 6 1/2 yards 1 1/2 inches wide. Price 15c or two for 25c.

No. 4787—Two "Nursery Toys." Cut in one size. It will require 3/4 yard of 36-inch material for the "Teddy" and 1/2 yard for the giraffe. Price 15c or two for 25c.

No. 6925—Cut in one size. It requires 3/4 yard of 32-inch material for the camel and 1/2 yard for the squirrel. Price 15c or two for 25c.

HOW TO ORDER

Write plainly, giving pattern number and size. Address Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

Something Different

Cornflake Pudding

TWO cups milk, one-half cup sugar, two tablespoons cocoa or one square chocolate, three cups cornflakes, two teaspoons butter, one egg, one-half teaspoon vanilla.

Scald milk. Remove from fire. Add all but eggs. Cool. Add beaten egg. Pour into a buttered pudding dish, set in a pan of hot water. Bake in a moderate oven one hour. Serve hot with hard sauce or cold with whipped cream. One-half cup raisins, figs or dates, chopped, may be added. Addie Folsom.

Oyster Fritters

ONE and one-fourth cups pastry flour, two teaspoons baking powder, one-fourth teaspoon salt, one egg, paprika, four tablespoons evaporated milk diluted with seven tablespoons oyster liquor, one pint oysters, few drops onion juice.

Sift flour, then measure. Resift with dry ingredients. Beat eggs and add diluted milk. Combine liquid and dry ingredients and stir until flour just disappears. Drain oysters and chop. Season with onion juice and paprika. Add oysters to batter. Drop by spoonfuls in hot fat having a temperature of 360 degrees F. or hot enough to turn a one-inch cube of bread to golden color in 60 seconds. About five minutes are required for frying. Yield: six servings.

Glazed Apples

GLAZED apple rings are particularly good with either roast pork or cold cuts. If you do not know the leaflet, "Pork in Preferred Ways," by all means send to U. S. Department of Agriculture, Washington, D. C., for it, as it contains several other suggestions for serving this popular meat.

Four large tart firm apples, one cup sugar, one cup water, two tablespoons butter, melted, one-eighth teaspoon salt.

Prepare a syrup of the water, sugar and salt, cook for about ten minutes, and add the butter. Wash, core and pare the apples and cut crosswise into two or three thick slices depending on the size of the apples. Butter a large shallow pan and place the apples in it in a single layer. Pour the hot syrup over the apples, cover and cook slowly in a moderate oven until the apples are tender. Turn the slices of apples carefully so as not to break them, leave the pan uncovered, and continue the cooking until the syrup has become very thick and slightly browned. Serve either hot or cold with the main course of the meal.

So Good Mincemeat

ONE pound cooked lean beef, one pound raisins (cut in halves), two cups sugar, one teaspoon nutmeg, one cup suet, one pound currants, one teaspoon cinnamon, one-half teaspoon cloves, eight tart apples, one lemon—juice only, one teaspoon mace, one teaspoon salt. Meat juices—fruit juices—cider to moisten it all thoroughly.

Pass the beef, suet and apples through the meat chopper, add the other ingredients and mix well. Use plenty of juices to cook the entire mixture until apples are tender. This may then be sealed in jars and kept indefinitely in a cold place.

Berneta Nawroot.

To End a Cough In a Hurry, Mix This at Home

To end a stubborn cough quickly, it is important to soothe and heal the inflamed membranes, get rid of the germs and also aid the system inwardly to help throw off the trouble.

For these purposes, here is a home-made medicine, far better than anything you could buy at 3 times the cost. From any drugstore, get 2 1/2 ounces of Pinex. Pour this into a pint bottle and add plain granulated sugar syrup or strained honey to fill up the pint. This takes but a moment, and makes a remedy so effective that you will never do without, once you have used it. Keeps perfectly, and children like it.

This simple remedy does three necessary things. First, it loosens the germ-laden phlegm. Second, it soothes away the inflammation. Third, it is absorbed into the blood, where it acts directly on the bronchial tubes. This explains why it brings such quick relief, even in the severe bronchial coughs which follow cold epidemics.

Pinex is a highly concentrated compound of genuine Norway Pine, containing the active agent of creosote, in a refined, palatable form, and known as one of the greatest healing agents for severe coughs, chest colds, and bronchial troubles.

Do not accept a substitute for Pinex. It is guaranteed to give prompt relief or money refunded.

PINEX

for Coughs

DON'T SHIVER this WINTER

Wear **Indera** An **Indera** **FIGURE IT** **COLDPROOF** **KNIT SLIP**

It's easy to keep warm in the coldest weather. Simply wear an Indera Figure It Knit Slip. The slip that keeps warmth in and cold out.

Indera is knitted for style and comfort. It fits without a wrinkle.

A patented border prevents bunching between the knees, or riding up around the hips. And the patented STAY-UP shoulder straps stay up.

Indera is easy to launder. No ironing necessary.

Made in a wide variety of fast colors. In all wool, wool and rayon, wool and cotton, also cotton. For women, misses, children.

If your dealer hasn't genuine Indera in stock we'll see that you get what you want.

Style Folder No. 63 in colors sent FREE. Please mention dealer's name and address.

INDERA MILLS CO. Winston-Salem, N. C.

PRICES CUT BUY NOW!

NUGLAS 21¢

New Process—Double Strength Tite Woven Cellulose Mesh **Glass Substitute** Warm—Strong—Weatherproof **PASSES ULTRA VIOLET RAYS**

One-Tenth the Cost of Glass Best for Roofs, Windows, Screens, Barns, Windbreaks, etc. Ledges Agriculture, Greenhouses and Experts highly endorse and recommend the immense profit advantages of utilizing the Sun's Ultra-Violet Rays. New automatic machinery cuts our manufacturing costs—we pass the savings to you. NUGLAS is highly translucent, strong, warm, waterproof, weatherproof, fireproof, best in comes in rolls 40 in. (1 yd.) wide any length ready for instant use just cut with ordinary scissors—take it on. Properly installed NUGLAS will not sag, drip, or leak, and can be washed just like glass. Special wave and improved process give NUGLAS long life, strength and durability.

ORDER NOW AT THESE LOW PRICES 10 yards 36 in. wide \$2.48 40 yards 36 in. wide \$5.96 15 yards 36 in. wide 2.50 30 yds. 36 in. wide 4.25 24 yards 36 in. wide 4.65 36 yds. 36 in. wide 6.99 We Pay All Postage

We PAY You to Try NUGLAS Money Back Guarantee Indorse check or money order. If not satisfied, return it and we will not only refund your money but pay you 50c extra for your time and trouble. No other offer could be made. Immediate Shipment. NUGLAS MFG. CO., 64 E. Lake St., Dept. 57, CHICAGO

QUICK RELIEF SORE THROAT JAPANESE OIL

Antiquers—

Your biggest quick profit in the Currier & Ives prints from old homestead attics. Complete information. Standard values of best 600 priced \$15 to \$1500, only \$1.10 this week only. Act NOW. Quakerhill Co. 1452 S. State St. Syracuse, N.Y.

THE YOUNG PEOPLE

The Pigeon Parents' Home

By Shirley E. Hebel, Pennsylvania.

ONE day in early September I looked up and saw two beautiful pigeons. One was white and the other was white and blue.

I slipped into the wagon shed and watched them through a crack. They lit on a roof and began to court each other. He would walk up to her and she would walk away and sit down. She would go to sleep, he would steal up to her, she would wake up and move away. Finally at the end of all this he walked up to her and deliberately kissed her.

One day Daddy came in and said the pigeons were hunting material to make a nest. He also told me that he had nailed a strip of wood between joists that rest on the sill supporting the barn floor above, and forming the overshot below. But Mr. and Mrs. Pigeon did not choose to take that place. They chose a spot between two other joists. Mrs. Pigeon laid two eggs. There was a knothole just above their nest and a marauding rat from the barn above came and stole their eggs.

Next time the pigeons decided to take the nest that Daddy had fixed for them. Mother Pigeon laid her

eggs again. This time they got them hatched.

Daddy explained to me how they fed their babies. You know pigeons eat grain which they find lying about. Then they regurgitate and feed the babies this predigested food. The other day I saw one standing up. They are all feathered over, with little bob tails.

Now the old pigeons are looking for things to make another nest with. They will make their new nest at a different place so it will be nice and clean. Let's hope that there will be no rathole above this one.

The Youthful Cook

THE following recipes have been approved by nutrition specialists of the National Dairy Council:

Fudge Squares

One cup sugar, one-half cup butter, one scant cup flour, one-half teaspoon baking powder, two eggs, two squares of chocolate, one teaspoon vanilla, salt, one-half cup nuts, coarsely broken. Melt chocolate, add butter, cool slightly and add sugar and well-beaten eggs. Then add sifted dry ingredients, salt and vanilla. Pour into square cornered shallow pan, scatter nuts over top, and push gently into butter here and there. Bake in a moderate oven until done. Cut in bars or squares.

Peanut Butter Cookies

Two tablespoons butter, one and one-half cup peanut butter, one cup sugar, one-half cup milk, two cups flour, four teaspoons baking powder, one-fourth teaspoon salt, one-half teaspoon cinnamon, one egg.

Cream shortening and the peanut butter with sugar. Add egg well beaten, and milk, alternately with the mixed and sifted dry ingredients. When well mixed, chill. Turn out on a floured board. Knead lightly and roll into a very thin sheet. Sprinkle with granulated sugar, cut into rounds or fancy shapes and bake in a hot oven (375 degrees F.) until light brown.

Party Cookies

Two eggs, one cup sugar, one-half teaspoon salt, two-thirds cup sour cream, one-fourth teaspoon baking soda, one tablespoon water, three cups flour.

Beat eggs and sugar until light, add salt and cream (to which soda, dissolved in water has been added). Add sifted flour. Mix well. Chill. Turn onto a floured board, roll out one-fourth inch thick, and cut with animal cookie cutters. Lay on an oiled pan and bake 15 minutes in a moderate oven (325 degrees F.). Decorate with:

Scotch Cookies

One cup butter, two cups brown sugar, two eggs, four cups flour, one-half teaspoon soda, one teaspoon cream of tartar, one teaspoon vanilla, one cup broken nut meats.

Cream shortening with one cup sugar. Add well-beaten eggs with rest of sugar. Add sifted flour gradually. With the last cup of flour sift soda and cream of tartar. Add vanilla and nut meats. Knead this mixture into two loaves about ten inches



Drawn by Irene Miller, Pennsylvania.

To Whom Is He Singing?

Write a four-line poem about the singing cat and hurry it back to Contest Editor, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

What Christmas Gifts Are You Making?

"I'm 'up a tree' for new ideas for Christmas gifts" writes M. S. of West Virginia. "Won't some of the boys and girls of 'our page' tell us what they are doing?"

Of course, you can help M. S. Perhaps you're fixing a basket of carrots, apples and other farm things for your city cousin; gathering pine cones for picture frames, making a doll house for Little Sister or sewing something for Mother. Whatever your ideas are for making simple, inexpensive Christmas gifts from materials at hand, write and tell us about it so that we can pass them on to others.

Then, just to help fill the Christmas stockings, there will be five fine prizes for the best ideas. When you write, mention which of the following you would choose:

- 1- Football
- 2- Amos or Andy dolls (fourteen inches high).
- 3- Fountain pen
- 4- Beads
- 5- Framed picture

There will be just one week for you to hustle your answers back to Young People's Editor, Pennsylvania Farmer, 7301 Penn Avenue, Pittsburgh, Pa.

Remember—all letters must be in this office before December 6th. Send pictures or drawings of your gifts if you can.

Answers and prize winners in our Historical Contest will be in next week's paper.

Kindness to Animals?



By Perkie Butcher, West Virginia.

long and one and one-fourth inches thick. Let stand in refrigerator overnight. Slice very thin. Bake in a moderate oven (325 degrees F.).

Colored Icing

One and one-half cups confectioners' sugar, one-half teaspoon butter, one-half

teaspoon vanilla extract, two tablespoons hot milk. Add butter to hot milk, then add sugar slowly to make right consistency to spread. Add vanilla. For pink icing add one tablespoon strawberry or other fruit juice. For yellow icing add one teaspoon egg yolk and flavor with one teaspoon lemon juice and orange rind.

THE SNOWBANK

Five and forty snowflakes Came tumbling from the sky And said, "Let's make a snowbank. We can if we but try." So down they gently fluttered And lighted on the ground, And when they all were settled They sadly looked around. "We're very few indeed," sighed they, "And often make mistakes; We cannot make a snowbank With five and forty flakes." Just then the sun peeped around a cloud And smiled at the array. The disappointed snowflakes Melted quietly away. West Virginia. Genevieve Morris.

ANSWERS TO LAST WEEK'S PUZZLE Miss. Tenn. Mass. Pa. Ill. Mo. Wash. Ark.

Little Folks' Corner



247

Dolly-Folks Furniture

WAS there ever a little or middle-sized girl who didn't love a doll house above all things. Whether it be built of wooden crates and boxes, or just a group of cardboard rooms, this complete set of miniature furniture is just the thing to make it doll-home-like.

Six full rooms of furnishings, all most fifty articles, comprise the set. There is a dining-room suite of drop-leaf table, buffet, tea cart, half a dozen chairs, including one-armed host chair and a high chair for baby. The library has a grandfather's clock, desk type table, book cases, a charming fireplace, three easy chairs, a stool, daybed and end table. Living or music room, kitchen, bedroom and nursery are equally well furnished, and every single piece from piano to coal bucket makes up as cunning as can be.

This set comes printed on twenty sheets of tough, heavy-weight paper which scores and creases well, stands firm and glues into mighty sturdy

little furniture. Each sheet is about seven by nine inches. All pieces finish in proportion. The table is about one and one-half inches high, the bed three and three-fourth inches long etc.

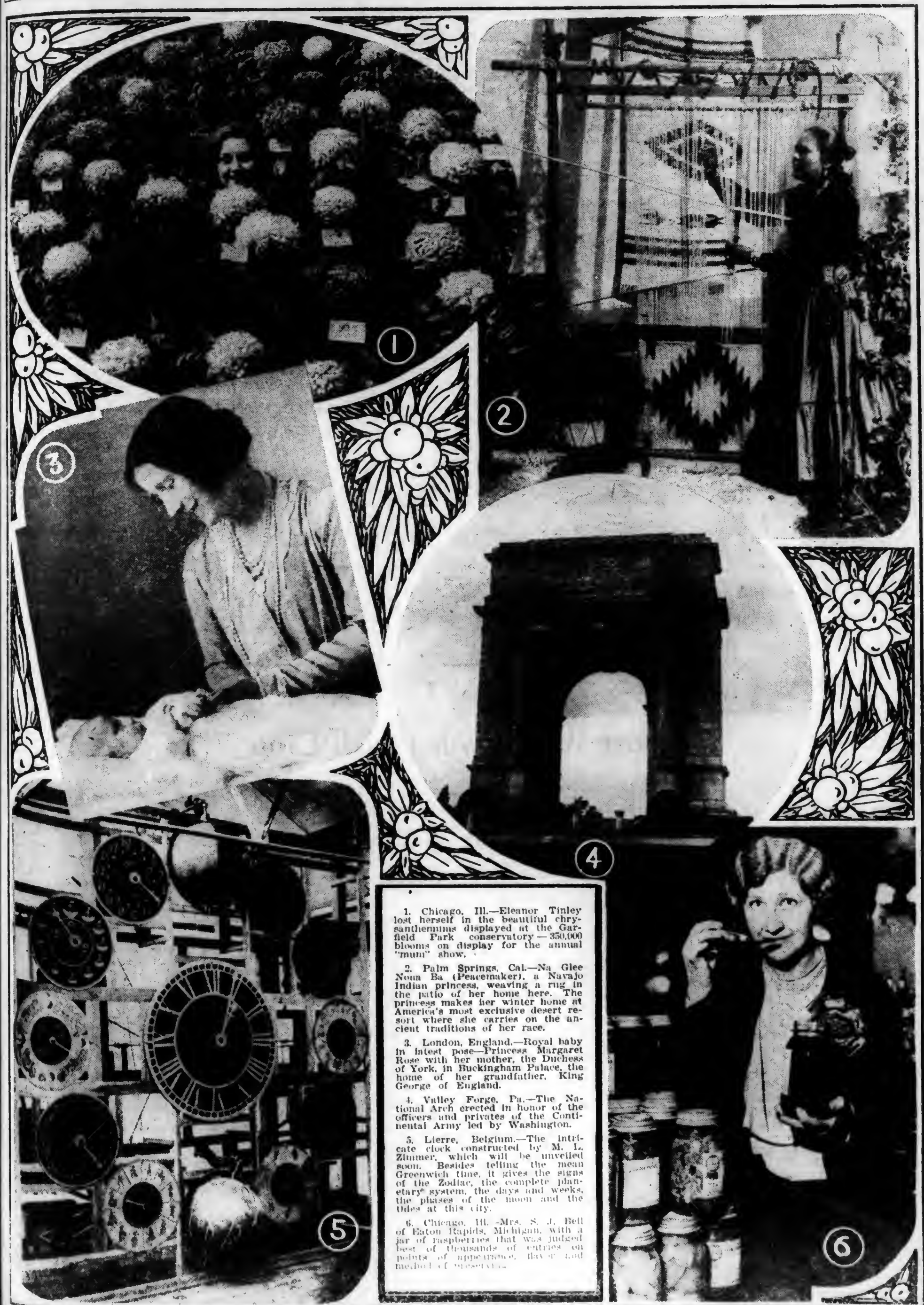
Hand tinting with paint or crayons adds considerably to the beauty of this set which is printed in black only. General directions for cutting, scoring, folding and gluing into shape are included in each order. The entire set will be sent as No. 247 at 40 cents. A 16-color wax crayon set for this or other projects is number 648 at 15 cents.

Send money order, stamps or money and check the set you wish. Be sure to write your name and address plainly. Address: Pattern Department, Pennsylvania Farmer, 7301 Penn Avenue, Pittsburgh.

No. 247.—Complete six-room set of paper doll furniture—40 cents.

No. 648.—16 color set of wax crayons—15 cents.

PASSING EVENTS IN PICTURES



1. Chicago, Ill.—Eleanor Tinley lost herself in the beautiful chrysanthemums displayed at the Garfield Park conservatory—350,000 blooms on display for the annual "mum" show.

2. Palm Springs, Cal.—Na Glee Nona Ba (Peacemaker), a Navajo Indian princess, weaving a rug in the patio of her home here. The princess makes her winter home at America's most exclusive desert resort where she carries on the ancient traditions of her race.

3. London, England.—Royal baby in latest pose—Princess Margaret Rose with her mother, the Duchess of York, in Buckingham Palace, the home of her grandfather, King George of England.

4. Valley Forge, Pa.—The National Arch erected in honor of the officers and privates of the Continental Army led by Washington.

5. Lierre, Belgium.—The intricate clock constructed by M. L. Zimmer, which will be unveiled soon. Besides telling the mean Greenwich time, it gives the signs of the Zodiac, the complete planetary system, the days and weeks, the phases of the moon and the tides at this city.

6. Chicago, Ill.—Mrs. S. J. Bell of Eaton Rapids, Michigan, with a jar of raspberries that was judged best of thousands of entries on points of appearance, flavor and method of preservation.

European Pasture Management

(Continued from page 8.)

so accurate a measure of fertilizer response as might be desired.

Major experimental difficulties which have been encountered are:

1. Grazing with sheep alone (Tree Field) has produced only about half as many pounds of meat per acre as grazing with both sheep and steers (Hanging Leaves Fields), the soil and treatment being the same. This being the case, the results from Tree Field, though they do clearly demonstrate the value of phosphates in bringing in and maintaining a stand of clover on clay, very obviously are lacking in scientific accuracy as a measure of the full response to fertilizer.

2. The liability of sheep to soil-borne diseases and parasites in the case of heavily stocked continuously grazed land has precluded stocking the better fertilized plots materially heavier than the poorer, with the result that much good feed has gone to waste on those better fertilized plots instead of being made into mutton and credited to the plot treatment.

3. This apparently unavoidable understocking has been especially unfair to the plot treated with nitrogen each third year in that when the nitrogen is applied and produces grass enough for some twenty to twenty-five sheep for a month or six weeks in early spring the nine or ten sheep on the plot fail utterly to keep the grass properly grazed as a result of which it not only goes to waste and fails to be properly credited to the nitrogen treatment but also smothered out the clover and seriously injures the sod for the two years intervening before another nitrogen application. The poor results obviously are due to faulty grazing management rather than to nitrogenous fertilization.

Summary of Impressions

I should summarize my impressions as to the results of the fertilizer tests in Tree Field and Hanging Leaves Fields at Cackle Park about as follows:

1. Phosphatic fertilizer—slag, superphosphate and bone—have been remarkably effective in bringing in and holding a stand of wild white clover, which in itself is excellent pasture so far as it goes, though not particularly high yielding; and the clover in turn, together with livestock management well calculated to conserve plant food, has built up the nitrogen supply to a point where the grasses do fairly well.

2. Potassic fertilizers have not been necessary on this heavy clay soil.

3. Nitrogenous fertilizers have shown the usual response in greatly increased grass growth but the methods of grazing management have not been such as to utilize this increased growth or even to keep it grazed down sufficiently to avoid serious injury to the sod.

Many European writers on pasture fertilization would seem, from their recommendations, to be slag enthusiasts, but such is not the case. They are really phosphoric acid enthusiasts and recommend slag as a source mainly because in their countries it is a domestic product and usually the cheapest source of phosphoric acid. The fact is that about equally good results seem to be secured from dressings of slag, superphosphate, dissolved bone, the newer ammonium phosphate fertilizers and even fine ground rock phosphate provided it is the soft Algerian phosphate. The harder phosphate rock such as is more common in the United States is reported to be less satisfactory.

Our American iron ores and processes of iron and steel manufacture do not yield slags of a sufficiently high phosphoric acid content to render them commercially valuable and imported slag necessarily costs us a good bit more than prevailing prices

in Europe. Fortunately, however, we are better situated than Europe with respect to superphosphate since we have abundant domestic supplies of phosphate rock.

Calcium phosphate in the soil is essential to good yields and calcium phosphate in the herbage is essential in animal nutrition. Few soils are well supplied with it. The small supplies which are usually present suffer rapid depletion because of removal from the land of phosphates in the bones of animals and in milk. The phosphoric acid also tends to enter into chemical compounds in the soil which are not readily available to plants. Consequently we find the need for phosphatic fertilization well nigh universal. In America, in Europe, in Australia and in New Zealand all recognized pasture specialists regard it as the basis of any successful treat-



Packing-house, Pennepacker peach orchards, Lehigh County, Pa. Small section of orchard may be seen on hill in left background.

Fast Work with Peach Crop

IN Lehigh county, Pennsylvania, the Pennepacker Company has a peach orchard of 8,000 bearing trees and this year the crop of 16,000 bushels was picked, taken to market and sold in the first two weeks of September. While there may have been other crops just as large in the East it is doubtful whether any other of the same size was "cleaned up" in so short a time.

The orchard is on the hills which rise on both sides of the state highway in the valley where a modern packing house has been built for convenience in loading the big trucks which haul the fruit to the wholesale markets and also to serve as a roadside stand to dispose of the soft fruit. The trees have had good care and careful spraying under the direction of C. D. Francis, so that this year many of the six-year-old ones yielded three bushels each.

To keep things moving at the rate they did during the harvest it was essential to have plenty of help, so it was not surprising to find 125 pickers getting the fruit from the trees. They used handle picking baskets, of which 4,000 were in use. These were hauled in two-deck loads on five trucks to the packing house. The trucks used low open express bodies and had the windshields taken off so that they could go under the low limbs in the orchard without injury to them.

As soon as the fruit reached the packing house it went over the peach grader. Six to eight persons at the 15-foot conveyor roller picked out the culls which this year amounted to only one bushel for every hundred.

ment for grazing land, though not necessarily an entirely sufficient treatment. Something else may be and often is required.

In the British Isles rather generally potash salts do not seem to be required for pasture land. There are two apparent reasons. The first is that British farmers tend very strongly to the use of their heavier, and hence potash-rich, lands for grazing and their lighter, and hence potash-deficient, lands for arable crops and the second is that they graze much more meat stock than dairy stock and keep it continuously on the pasture and hence reduce potash removal in animal products and excrement to a negligible amount as compared with typical American dairy farm practice.

Heavy Soil Best for Grass

Sir John Russell, Director of the Rothamsted Experiment Station, tells me that the reason British farmers use the heavier soil for grazing and the lighter soil for arable crops is that the heavy soil is best for grass and clover but not by any means best

for arable crops because it is so difficult to work, while the light soil is best for arable crops, being warmer and easier to work, but by no means best for pasture. The light soil, of course, is not so strong as the heavy soil but it is cheaper to buy chemicals to correct that weakness than to farm the heavier soil in arable crops.

However that may be, the fact remains that most British pastures of the better class are on decidedly heavy soils, far richer in potash than average American grazing land in the Hay and Pasture Belt, so British data on pasture fertilization must be interpreted in that light instead of taken to apply directly to American conditions.

The factor of livestock management on pasture, too, is tremendously important. It makes a lot of difference in the plant food balance whether a bunch of steers is turned into the pasture in the spring and left there continuously until fall or a milking dairy herd turned in each morning and taken out at night and kept over night in a small paddock or night pasture elsewhere. I had occasion some years ago to estimate what the difference would amount to in pounds of plant food per animal unit per season. That estimate is presented in Table 1. I do not for a moment claim that this estimate is exactly correct for all sorts of conditions, but it certainly does present an essentially accurate picture.

Table 1

Effect of different classes of animals and grazing management on plant food balance:

Young beef animal continuously on pasture, 300 lbs.	Nitro.	Phos.	Potash
Live weight gain	9	6	1
Milking dairy cow kept out of pasture over-night.			
In 4,000 lbs. milk	20	12	8
In 4,750 lbs. dung	19	9	5
In 2,000 lbs. urine	20	tr.	27
Total	59	21	41

My reason for presenting this estimate at this point is because typical British practice underlying British experiments and recommendations differs in such an important way from typical American practice in its effect on the plant food balance. Multiply these annual differences by the 50, 100 or 150 years during which our pastures have been grazed and it becomes at once apparent that we have a quite different plant food situation to deal with and that, in consequence, such data as the Cackle Park data cannot be applied to American dairy pastures without important modification.

A Bigger Squash

I READ in your paper that Mrs. Jesse Verner of Washington county, Pa., has a Blue Hubbard squash that weighs 20½ pounds. Will say that I have a Winter Hubbard squash that weighs 26 pounds. Think I go one better. F. C. J. O'Sullivan, Bradford county, Pa.

I HAVE just read about Mrs. Jesse Verner's large squash, which was a big one. I will tell you about what I raised from one Green Hubbard squash seed that got planted in my strawberry garden. One weighed 20 pounds, one 18 pounds and one 13 pounds. These were all raised from one seed. The vine grew to a great length. Mrs. Fred Stewart

I HAD read about the Blue Hubbard squash, and I have the pleasure of writing you a word of encouragement in our dry season.

I raised three squashes on one vine. After reading the letter mentioned above I weighed one and it weighed 36½ pounds. Now who can beat it? Mrs. Laura Buffington, Wood county, W. Va.

What Our Readers Say

Fair Game

THIS hunting season in our parts is limited in time and the "bag" is narrowed down. Sportsmen and humanitarians have advised us farmers to leave a few shocks of corn standing in the field all winter to feed the birds so they won't starve. Corn is scarce this year and the shocks are small—doubtless a bird with a bird's small head would be forced to wonder why the farmer was so stingy in leaving such a small and meager supply of grain.

In our community is a clique of men who trap shoot—blaze away by the hour at "clay birds"—practice up so that when a bird rises from the ground out on the farm the trap shooter will knock the feathers and the wind out of the bird just like he cracks up that "clay pigeon" on a July day standing in the shade of a big tree shooting just for fun. An English sparrow is not more than half as large as a clay pigeon and has something around the same spread of wings, but it is unlikely that city men will take to appearing at the farm gate seeking permission to feather, puncture and bring down the pestiferous sparrows that are bound to find the corn whether shocks are left in the field or not. If sparrows are going to be punctured the farmer is left the job of puncturing his sparrows single handed.

No Rules or Restrictions

Not saying what the opening day's bag of game birds was in our case, the day was a suitable reminder to fare forth after dark and conduct a personal "member to member" canvass of the sparrow inhabitants of the farm together with the numerous guests that have a way of turning up at supper time and bed time.

The bag is unlimited—you can trap, snare, poison, or shoot and such other methods of attack and destruction as your imagination may suggest. So since the trap-shooting city man and the shotgun wizard of the next town and the blow hard "shot" from the village are not going to turn up on the farm to help exterminate odds and ends of wily pests the farmer this year is in a way to have time and low-priced amusement making a pretty clean sweep of the pestiferous riff-raff that has been enjoying free board and quarters around the place for a long time. Last night with a flashlight in one hand we reached up here and there for a sparrow (cock or hen, no sporting discrimination here) and gave the head approximately one-and-a-half turns to the right or to the left and let it go at that. Hiram Dobbin.

Drainage

POSSIBLY this is a poor time to mention drainage. Irrigation is what we need after such a dry season. But now is a fine time to put in drain tile where wet spots occur. When wet weather comes it would be a great help to have the field uniformly dry where it formerly was too wet in spots for field operations.

In this state many of our drainage problems are caused by springs coming out on the hillside. Seams of coal, rock, clay and other impervious strata outcropping on the hillside often cause the flat land below to be wet, spoiling sometimes the best land on the farm. If a tile is placed above the spring line and down to the impervious strata it will often dry up

To Improve County Roads

IN the September 20th issue of Pennsylvania Farmer appears an article condemning the action of the Highway Department for raising the rates to the utilities. I agree with the writer that this increase will eventually be charged up to the patrons of the utilities. Since that article asks for opinions of rural people I will endeavor to express mine.

I think it is high time that rural people demand a halt in the Highway Department's powers and certain activities. It is a shame the way people's property is destroyed in changing highways. Most of these changes are not only unnecessary but very expensive. There are thousands of miles of rural roads which at certain times at least are practically impassable, yet the farmer must pay a road tax and in addition must pay a license on his car or truck and a license to drive it. The automobile is responsible for the condition of the road. The Highway Department collects the license money and spends it as it pleases. There is sufficient money available to put the roads in at least a fair condition if money was properly used.

I think an entirely different system of road construction should be put in operation. First the Highway Department should be reduced to a commission of less than a dozen men. All construction work should be taken away from them. Give them supervision of the licensing of autos, give them full charge of traffic, let them formulate traffic rules and regulations. These should then be submitted to the Legislature for ratification. Make it a state law and not merely a highway ruling.

The money derived from the licenses should be divided among the different county commissioners according to the mileage of unimproved roads in each county. Each board of commissioners should redvide a portion of their allotment to the boards of supervisors of the various townships according to road mileage. The county commissioners should then build the main highways and the township supervisors the byways or cross roads. In this way we could have many more miles of improved road than we can ever expect under the present system.

I believe that the township can build three or four miles of road for the same money now used by the Highway Department for one mile and practically as good road.

The Highway Department is getting to be a giant which should be reduced to a midget. Elmer Waltz, Wayne county, Pa.

TO TENANT FARMERS

Why not BUY a farm

at

Attractive Prices

with

Low Cash Payment

and

Balance on Mortgage?

Write for full information—
Dept. B.

FEDERAL LAND BANK
OF BALTIMORE
Baltimore, Md.

Colds in Poultry Quickly Banished

Wheezing, Rattling, Choking, Ends.
Trouble Stopped in 48 Hours

Readers with colds in their flocks should read this letter from Thomas Pulliam, Shively, Ky. He says:

I have had birds with their eyes closed from colds, and have saved them all. One cockerel was nearly dead. He lost 5 pounds. I gave him Group-Over and in two weeks he was full of egg and holding every rooster on the place. Why do people let their birds die? It's so easy to cure them with Group-Over.

It is amazing how quickly Group-Over ends colds in poultry. A few drops in the nostrils usually restores every symptom overnight—while a little in the drinking water, as a preventive, cures the whole flock. For a liberal supply, send 25c for 81 for the extra large supply in barrel. Group-Over Co., 674 Postal Station Bldg., Indianapolis, Ind. As Group-Over is guaranteed to do the work or money refunded, it costs nothing to try.

FARQUHAR SAWMILLS

Produce good Fall and Winter profits. They saw accurate lumber which commands top notch prices. Easily operated. Built in sizes to suit power. Chain Oiling or Roller Bearings. Power Recorder, Modern and a money maker.

Write for Bulletin 629 and 629-A.

A. B. FARQUHAR CO., Limited
Box 646, YORK, PA.

Starts Hens Laying

Here's a New Way to Get Eggs in Winter.
Costs Nothing to Try

Mrs. C. H. Wagner, Milwaukee, Wis., has a real idea for chicken raisers who are not getting plenty of eggs. She says:

On Nov. 1st, our 150 pullets were not laying. I saw them. Don't know and got 261 eggs in the next 3 weeks, sold \$75 worth in December, and sold 100 in January. The birds were strong and healthy all winter, and cackled like I was. Don't think the Chinese brand of tablets, which Mrs. Wagner used, are opening the eyes of chicken raisers from America. These tablets can be had from Burrill-Dugger Co., 126 Park St., Boston, Mass., or from Burrill-Dugger Co., 126 Park St., Boston, Mass., or from Burrill-Dugger Co., 126 Park St., Boston, Mass.

How others have made BIG MONEY from poultry

What others have done, to make more profit from poultry, you can do. Complete facts, detailed "success" stories every month in

The POULTRY ITEM

Subscribe now and get 7 "Secrets" of greater poultry profits. Read how to have more eggs when eggs are highest. Every phase of poultry raising and poultry selling covered by experts.

7 months trial subscription, only 10c.—a dime. Satisfaction guaranteed or money back. Send coupon now.

Enclosed is 10c. Send me Poultry Item with the seven "Secrets" articles.

Name
Address

BRILLIANT LIGHT for NIGHT WORK!

Hay in before dew-wet. National Carbide in the RED DRUM gives you the most light for your money. Prompt service everywhere. Ask your dealer. If he cannot supply you, write us. NATIONAL CARBIDE SALES CORP., Lincoln Building, New York, N. Y.

NATIONAL CARBIDE

PARKS' BARRED ROCKS

BUY YOUR PULLETS, COCKERELS & ROCKS NOW. Prices about 1-2 less than later. Buz, banty, dorking, free range, red, white, game, etc. Many pullets ready to start laying. Cockerels and rocks able to stand the winter and lay and get in your flock. Parks' Rocks are America's oldest and greatest name brand of birds—carefully selected, transported and delivered for years since. Write for prices and catalogue. Customers report flock averages up to 250 eggs for latest prices and catalogue. J. W. Parks & Sons, Box 6, Altoona, Pa.

Truslow Chicks

Result of 49 Years Breeding

Let me give you a book telling about wonderful stock about broilers and chicks—production, profits about continuous excellence. Write today. It's FREE. TRUSLOW POULTRY FARM, Inc., Box 7, Chestertown, Md.

BROILER—RAISERS

SHIP YOUR LIVE BROILERS and other poultry to New York's Oldest Live Poultry House. Est. 1885. We are bonded commission merchants. Birds fed returns made daily. Highest prices. Our outlet is unlimited. Inquire about us. Write for quotations, crates, tags, shipping instructions. Holiday. Chicago. Order 1-2. KRAKOR POULTRY CO., Inc., West Washington Market, New York City.

ULSH'S Superior Chicks

White Wyandottes, White Rocks and Barred Rocks. Write for Fall & Winter prices. Hatches weekly the year round. 100% live delivery. Guaranteed. Postage paid. JAS. E. ULSH, Box 7, Beaver Springs, Pa.

TANK HEATER

BURNS OIL

Fits any tank. Burns 14 to 16 hours on 1 gal. kerosene. No sparks, ash, smoke. Guaranteed. Write for Special Literature. We also make Hot Water and Potable Smokehouses. Write for folder. Dred in use of factory price. KRAKOR POULTRY CO., 130 N. 14th St., Washington, D. C.

Farmer's Business Letter

IT would be easily possible right now to assemble a symposium of discouragement and depression, but that would not be helpful to anybody. Suffice it to say that the average of unfavorable reports—bank failures, bread lines, and so on. This condition has its reflection in markets where farm products are handled, and puts the buyers in the saddle, enabling them in some cases to work prices lower, as we have seen this week. No better evidence of this is to be had than in the hog market. Packers are now talking seven dollar hogs where a few weeks ago they thought they would be lucky to be able to put up their winter crop on the basis of hogs around eight dollars. Time may show, however, that they are now over-optimistic about that they can do with prices. The situation has been if anything worse in grain markets. A good deal of this is due to the great feeling of depression in men's minds, making it possible for those who are on the bear side to get a ready hearing. Down-in-the-mouth talk has the right of way, and makes any advance almost impossible.

Board Buys More Wheat

It is claimed by advocates of the Farm Board, and even admitted by some not enthusiastic about that body, that Board operations the past few days actually prevented a panic in grain markets. Heavy selling of wheat that threatened to send prices to new lows and that did demoralize foreign markets was met by government buying that checked the decline and so prices for the week are closing in about the same notch where they opened. It is said that the wheat now held by the Board's Stabilization Corporation is worth about \$76,650,000, and it is estimated that it cost around \$100,000,000. Officials of the Board claim that our wheat market is on a domestic basis, and they think they will come out all right because they have confidence that the feeding of wheat to livestock will clean up the surplus. No doubt the wish is father to the thought, because there is obvious occasion to say that the outcome of the Board's holding continues as a surplus hanging over the market next season as a new harvest approaches. The more wheat the Board holds the more it has to worry about, and the more uncertainty there is in the market in general.

But other countries are having their wheat worries, too, notably Canada. Word from that country says that the reorganization of the central selling agency of the grain pools is in the offing. The reorganization is expected to involve voluntary liquidation proceedings on the part of the selling agency, as distinct from the three prairie pools. The governments of the three prairie provinces are involved to the extent of \$20,000,000 by wheat pool losses. Virtual government operation would appear to be the outcome.

In the meantime wheat production is on the upgrade in other parts of the world. Thus a report from Brazil says that a campaign for increased wheat production is under way, resulting in a steady increase in the crop. Seed is being distributed among farmers and experimental work to improve the crop is being carried on.

Big Break in Hogs

Chicago had a big run of hogs but other markets didn't. Chicago, however, is the basic market and the price trend was decidedly downward. Average price for the week at \$8.15 compared with \$8.75 last week, and was only a dime above the lowest since July, 1924. It was almost a dollar below a year ago. Conditions enabled packers to force prices lower, and they are now talking seven dollar hogs. To what extent such talk is for effect and to what extent it expresses judgment is impossible to say.

Chicago had 217,000 hogs this week, the largest week since the first of last February, and the largest during 1929 with the exception of three weeks. But the eleven market run this week totaled only 584,000 head, against 585,000 last week and 667,000 the same week last year.

Quality of hogs continues good. More hogs are averaging 225 pounds and heavier, but there is a scarcity of packing grades. The latter are selling at relatively high prices. Many times 300-pound packing sows have sold within 50c of the prices paid for good light and medium weight butchers.

Practically nothing was done in the

hog futures market, only four transactions being recorded. Medium weights for January delivery sold at \$8.40.

Western Lambs at Top

Fed westerns made up a big share of recent receipts. Several large strings of lambs from the western ranges arrived this week and sold at the top prices. Some averaged 88 lbs., at \$8, with 102-lb. averages sorted out at \$7. These lambs have been carried along in hope of some improvement in the market, and, according to the salesmen, they have been on the open range, without grain. They were as fat and well finished as most of the fed westerns offered lately. They were from Montana.

Salesmen were pleased to see the slight improvement in the market the last half of the week. They have been advising the country to hold down supplies for this week, which is considered "poultry week" on the market.

The 20 leading markets this week show a decrease of 135,000 head, or 33 per cent compared with a week ago. The shortage was felt by eastern slaughtering houses and shipping orders on principal western markets increased after midweek. Sorting near the close was the lightest in some time.

Demand for feeding lambs dropped off early in the week, but increased when fat lamb prices scored a recovery. Hundreds of white face feeders are selling around \$7, while best black face feeding lambs are bringing \$7.25. Very few transactions were made in the breeder ewe trade. Yearlings are quoted at \$5.50-\$6.50 and three and four-year-old stock at \$4.75. Some thin kinds have sold as low as \$3.50.

LIVESTOCK

PITTSBURGH

Cattle

All eastern cattle markets had very light receipts at the beginning of this holiday week. Only 20 carloads or about 500 head appearing at this point. While demand was light it was sufficient to allow sellers to get an advance of 25¢-50¢ per cwt. on the steers offered. Nothing of top quality was on sale, but some right good yearlings sold at \$10 and a few still better. Demand for choice fat cows brought \$9.95, and fleshy lighter steers \$8.95, all looking higher and some of the light steers a good half-dime above market prices. Some plain light steers sold at \$7.75, not many of that class here. Heifers moved downward from \$8 per cwt. or a quarter or more above last week's prices. A few choice fat cows brought \$6 per cwt. and the better kinds were stronger. Canners sold a little better, the type at \$3 per cwt. Bulls showed little change, few doing at \$5 or better. Demand for light steers is narrow in keeping with beef consumption.

Choice grain-fed steers	.....	\$10 00/10 50
Choice steers	.....	9 50/10 00
Good to choice, 1,200 lbs.	.....	9 00/9 50
or over	.....	9 00/9 50
Fair to good, do.	.....	8 50/9 00
Plain heavy steers	.....	8 00/8 50
Choice handy-weight steers	.....	8 50/10 00
Good butcher steers, 1,000 lb.	.....	8 50/9 00
1,150 lbs.	.....	8 50/9 00
Fair to good, do.	.....	8 00/8 50
Ordinary to fair, do.	.....	7 50/8 00
Common, do.	.....	6 50/7 25
Good light butcher steers	.....	8 25/8 50
Fair to good light steers	.....	7 50/8 00
Common to medium, do.	.....	6 75/7 50
Inferior light steers	.....	5 50/6 25
Feeders	.....	Nominal
Stockers	.....	Nominal
Choice fat heifers	.....	7 75/8 00
Good to choice heifers	.....	7 25/7 75
Fair to good heifers	.....	6 50/7 00
Common to fair heifers	.....	5 00/6 00
Choice fat cows	.....	5 50/6 00
Good to choice fat cows	.....	5 00/5 50
Fair to good cows	.....	4 25/4 75
Common to fair cows	.....	3 50/4 00
Canners	.....	2 50/3 00
Fresh cows, calf at side	.....	50 00/60 00
Choice heavy bulls	.....	6 00/6 25
Choice handy-butcher bulls	.....	6 00/6 25
Good handy bulls	.....	5 75/6 00
Fair to good bulls	.....	5 00/5 75
Common to fair bulls	.....	4 50/5 00
Inferior bulls	.....	4 00/4 50

Hogs

Last week's market closed at \$8.75 for bulk of the receipts. Monday's supply was light and all the light and heavy-weight hogs were about a quarter higher, going at \$9 per cwt. Heavy hogs were sold at \$8.70-\$8.75 and heavy mixed brought \$8.80-\$8.85 according to the number of haves in them. Medium Yorkers and pigs of standard quality all sold at \$8.00-\$8.05 for Thanksgiving have raised recently from \$8.50 up to \$12 per cwt. those of the roasters of 10 lbs. or less went at \$10.11. Sows brought \$7.50-\$7.75 mainly.

Dull Cattle Trade

With coolers full of beef and Thanksgiving coming on, trade in cattle was dull this week in spite of much lighter runs. Yearling heaves were a little lower and heaves a little higher, not much change. Average price of steers was figured at \$10.25, the same as last week, and a little over two dollars under last year. Top steers of weight brought \$12.50, the same as last week, and top yearlings \$13.25, which was 50c lower. Summer weather all week contributed to the weakness. With a change in this respect and with the holiday out of the way there is some reason to hope for a better turn in the trade though materially higher prices are not expected. In fact some feel that the price level will do well to hold somewhere near what it is now, in view of general conditions. It is recognized that beef is very sensitive to general business conditions and on that score the outlook is not regarded as especially favorable though it is recognized that the turn for the better must be nearer than it was a month or a week ago.

The Dan Casement Herefords, grand champion carlot of cattle in the Kansas City American Royal show, brought \$20.50 a cwt. at auction, while the grand champion single steer, an Angus exhibited by Scrpps of Michigan, brought \$1.50 a pound. Top price for feeder cattle was \$17.50, paid for second prize Angus calves shown by Johnson Workman of Michigan. First prize feeders, Angus calves shown by R. W. Bowling of Kansas, brought \$13.50.

Promise Dividends

Deviating from a long-established policy of making no predictions on future earnings, the International Har-

vester company has issued a statement, not only estimating that the current year's profits will be in excess of dividend requirements but also declaring that estimates for next year's business indicate that dividends will be more than earned in 1931. As a result of this opinion, the directors of the company felt warranted in continuing their present 62½ cents quarterly dividend policy on the common stock throughout the coming year.

Chicago, Nov. 22, 1930 Watson

Inter-State Milk Producers

THE Inter-State Milk Producers' Association marked the close of their fourteenth successful year at their annual meeting held at the Benjamin Franklin Hotel in Philadelphia on November 18 and 19. This organization, starting in 1916 with a membership of about 2,500 producers in the Philadelphia milk shed, has grown to nearly 25,000, and the guidance of the directors of the Inter-State has proved profitable to both the producer and the consumer.

President Allebach in his annual address said, "The exceedingly high production of milk produced during the fall of 1929 and also during the early months of 1930, made it an outstanding period to test the effectiveness of the Philadelphia selling plan, usually termed the 'basic and surplus plan.' In addition to the high production of milk, we also found the general depression in the labor situation, which began last fall, to have been quite a factor in determining the value of the basic and surplus plan.

"A close check-up on our sales during the past year we have found that consumption has declined from six to ten per cent from that of 1929. The organization sold during its past fiscal year \$85,545,785 pounds of its members' milk for a total value of \$29,370,199.32. This milk was produced in 24 counties in Pennsylvania, 9 in New Jersey, 3 in Delaware, 9 in Maryland and parts of several counties in Virginia and West Virginia.

From the territory which the association covers comes 99½ per cent of the milk Philadelphia consumed during the past year, 21 1-3 per cent of the cream the city consumed and only 5 per cent of the butter consumed.

From the beginning of the association's activities, its membership realized that if the milk market of Philadelphia was to be held by local producers, quality in the product was the best base upon which to build a fence around the market. Accordingly a quality control department was organized. The work of this department and the cooperation of the producers has raised the standard of milk so that Philadelphia today is receiving as good milk as any city in the country. No better argument is necessary to hold the market than this.

On Tuesday evening producers, consumers and the public of the Philadelphia district gathered at the festive board to make this year's banquet one of the largest in the history of the organization. Again the dramatic department of the Dairy Council entertained the group with one of their plays, "Beauty's Bloom."

The eight directors whose terms of office expired this year were re-elected. They are J. H. Bennett, Lebanon county, Pa.; A. R. Marvel, Talbot county, Md.; Ivo V. Otto, Cumberland county, Pa.; J. A. Poorbaugh, York county, Pa.; Frederick Shangle, Mercer county, N. J.; R. L. Tussey, Blair county, Pa.; and F. M. Twining, Bucks county, Pa. G. W. H.

FEED MARKET

The following quotations are for transit and nearby shipment November 24, according to the U. S. Bureau of Agricultural Economics. They show the approximate cost of feed per ton (all in 100-lb. sacks) and grain per bushel in carlots at Philadelphia and Scranton rate points.

Barley, 24/25; standard middlings, \$1.00; middlings, \$28; cottonseed meal, \$1.00; per cent, \$37.50; gluten feed, \$34.25; white oats, 43¢; No. 2 yellow oat, 42¢.

PITTSBURGH MILK PRICES

Dealers' buying prices for November milk are announced by the Pennsylvania Cooperative Sales Company as \$2.40 per cwt. for Class I and \$1.70 for Class II. Pittsburgh country plant. Prices for milk shipped are \$3.05 for Class I and \$2.00 for Class II.

National Grange

(Continued from page 7)

cept as a part of legitimate hedging operations in the grain market. Another favored the establishment of a Bureau of Conservation in the U. S. Department of Agriculture, this bureau to take over all the conservation and irrigation work now supervised by the Department of Interior. The tax problem was attacked again, \$5,000 being voted to defray the expenses of an intensive study of the question by Grangers.

Nearly seventy resolutions were introduced at the Rochester meeting. Of those adopted the few mentioned above were considered most important, but some of the others came a little closer home. One, for example, asked all Grangers and other farm organization members to stop using butter substitutes. Another empowered the executive committee to provide an identifying emblem to be placed on Patrons' automobiles and at the entrance to their farms. Still another was aimed to promote the popularity and sale of corn sugar.

Wide Range of Subjects

The usual stand was taken against further land reclamation while food surpluses remain, and for tariff protection as long as foreign living standards are below our own. Philippine independence was urged, so laws may be passed to shut out the people and products of our Far East dependency. The patrons asked the deportation of all aliens convicted of breaking our prohibition, narcotic or criminal laws.

During the closing hours of the session a large number of resolutions were passed in rapid succession as the various committees reported on their deliberations. Some of these final resolutions called for a complete study of the tax situation by the National Grange, for a study of the nationalization of the currency, for continuing effort in procuring federal aid for farm-to-market roads, for opposition to any change in prohibition laws "until some better practical plan for the control of the liquor traffic is brought forward," for government control of water power resources, for changes to overcome certain shortcomings of the Federal Farm Loan System.

Another resolution thanked the railroads for their timely assistance and cooperation with farmers in the drought-stricken areas. Still another declared that "no group of organization be permitted to pay any portion of the expense of extension workers."

State Reports

The annual reports of the 32 masters of State Granges revealed pessimism and optimism in every degree and economic theories of every variety. Membership in the order as a whole is growing, though it is having its ups and downs in various states. A new state Grange was organized in South Carolina since the last annual meeting.

State Master Dorsett of Pennsylvania reported the organization of three subordinate Granges during the past year and of 21 juvenile Granges, besides the reorganization of four subordinate Granges. However, he blamed the drought, business conditions and the decrease in farm population for a loss in total state membership. Before the recent election of the Home Economic Committee of the State Grange "offered a prize of \$5 to every Grange in the state that succeeded in getting all their sisters to the polls to vote."

While the men of the order were devoting their reports to state, national and international affairs, their wives were thinking of things more intimately connected with life back on the farm. Perhaps that is why the women's reports seemed to some

observers to be more valuable and more interesting than the men's dissertations on economics.

One of the women's reports told how an Oregon Home Economics Committee organized a community laundry which is supplied with steam and hot water from the local creamery. Each woman pays 35 cents for two hours use of the modern laundry equipment. They keep it busy all week.

Mrs. Dorsett told how several subordinate Granges in Tioga county, Pennsylvania, had a Little Country Theatre in a tent at the county fair. They staged several one-act plays and charged 15 cents admission. Their show took crowds away from the midway and cleared a tidy sum for each Grange.

Mrs. Susan W. Freestone, wife of the New York State Master, is in charge of the 1932 meeting. She reported that there are now 17,000 children in the 722 Juvenile Granges in the United States, including 138 new ones organized last year. Pennsylvania now has 2,403 juvenile members in 83 Granges, a gain of 21 Juvenile Granges in the last year. Ohio has 4,691 youthful members in 209 Juvenile Granges, including 22 new ones. Michigan's 37 juvenile organizations have 820 members.

In the national juvenile contest sponsored last year a Rhode Island Grange, Rumford No. 13, made the highest score, winning a silk flag.

Philadelphia Produce Review

THE Philadelphia egg market showed a weaker tendency on fancy white eggs during the past week, while browns and mixed colors were about steady. The weaker tone of the market was apparently due to a lessened demand and slightly heavier production. Offerings of fancy white eggs were fairly liberal and some dealers found it difficult to prevent accumulations. Fancy brown eggs were quite steady with the light offerings bringing practically the same price as the whites.

Although the easy tone of the fresh egg market was expected around December first, the present weakening has appeared about 30 days earlier than last year. At that time prices were 10 cents higher and they continued to rise, reaching their peak on December 23. The present weakness may be only temporary but there is evidence that the consumer is unwilling to pay the extreme prices which prevail in retail channels. On the other hand, the low prices at which storage stock is selling may have had some effect on the demand for fresh eggs.

It is reasonable to expect gradually increasing production from now on to be accomplished by somewhat lower price levels unless the demand shows a marked improvement in the near future. Storage eggs are moving more freely with prices steady to firm. Fancy quality April pack was selling within a range of 25¢-26¢, according to the Bureau of Agricultural Economics, while average offerings brought 23¢-24¢.

The New York egg market was unsettled during the week. Nearby henry whites ranged from 27¢ on very small eggs up to 52¢ for closely selected extras. Brown eggs brought 40¢-56¢, and mixed colors 20¢-50¢. Pacific Coast white eggs sold at 30¢-52¢.

Poultry

Receipts of live poultry were moderate in New York and the quality was average. Buyers were looking for fancy grades but the average and lower grades sold at irregular prices. Leghorn fowl sold at 17¢-22¢ per pound, colored fowl at 20¢-25¢. Lehigh chickens at 18¢-21¢. Reds at 19¢-22¢ and Rocks at 22¢-25¢. The turkey market in New York was unsettled. Receipts of dressed turkeys from the West and Southwest were heavy and far in excess of those of a year ago. Young toms sold at 20¢-35¢ per pound while young hens at about one cent lower. The turkey market in Philadelphia

Belmont Juvenile Grange No. 12 of Ohio placed second and received a fine gavel as a prize.

National Grange elections are held every two years. This being an off year there were only two vacancies caused by expiring terms. The incumbents, J. S. Goss of the executive committee, and C. P. Chapman of the Board of Managers of the National Grange Monthly, were re-elected to their respective positions.

Wisconsin was selected as next year's meeting place of the National Grange. Both Milwaukee and Madison hope to be the host in 1931; the national officers will choose between them. As compared with the eastern and far western states, the Middle West has relatively few Granges. It is hoped that next year's session will stimulate interest in the Corn Belt and the states to the north.

View from Washington

Looking ahead two years, Assistant U. S. Secretary of Agriculture Renick W. Dunlap was present to report that the 1932 meeting be held in Washington, D. C. Thus it might be part of the elaborate program being planned to celebrate the 200th anniversary of the birth of George Washington. The Bi-centennial is being sponsored by the government. It will last from February 22nd to Thanksgiving Day, 1932, and will emphasize the spiritual rather than the material progress of the American people during the last two centuries.

Secretary Dunlap warned the Patrons of Husbandry that they will have to fight to keep some of the present farm relief legislation on the

statute books during the next session of Congress. He expressed belief that the latest tariff act may be, and probably should be, the last written by Congress; tariff revision is a matter for a commission of experts, not for politicians.

Produce Quotations

PHILADELPHIA

Butter.—Higher than extras, \$7.14-10.14; 92 score, 36¢; 90 score, 33¢.
Eggs.—Fancy select, 50¢-60¢; extra firsts, 46¢; firsts, 40¢; seconds, 35¢-37¢.
Poultry.—Live fowls, 15¢-27¢; broilers, 13¢-25¢; old roosters, 15¢-18¢; pigeons, 15¢-25¢; ducks, 15¢-18¢; turkeys, 25¢-32¢.
Fruits.—APPLES, Pa. & N. J., bskts., various varieties, 40¢-65¢; CRANBERRIES, N. J., ¼ bbl. crates, early varieties, 25¢-27½¢; late varieties, 34¢-37½¢.
Vegetables.—BEETS, Pa. & N. J., per bunch, 11¢-13¢; BRUSSEL SPROUTS, N. J. & L. I., per qt., 10¢-13¢; CARROTS, N. J. & Pa., per bunch, 14¢-21¢; CABBAGE, Pa. & N. J., ¼ bskts., 15¢-20¢; CAULIFLOWER, N. J., crates, 75¢-81.25¢; CELERY, Pa. & N. J., wired bunches, 8¢-12¢; ESCAROLE, Pa. & N. J., per bu., 30¢-40¢; KALE, Pa. & N. J., bu., 25¢-35¢; LEEKS, Pa. & N. J., per bunch, 20¢-30¢; LETTUCE, N. J., crates, Big Boston, poor to ordinary, 25¢-75¢; MUSHROOMS, Pa. 3-lb. bskts., 75¢-81¢; PARSLEY, Pa. & N. J., bu., bunched, curly, 50¢-75¢; PARSLEY, Pa. & N. J., bu., 75¢-81¢; RITA-BAGAS, Pa. & N. J., 10-lb. sacks, 75¢-81.25¢; SPINACH, Pa. & N. J., bus., 40¢-50¢; TOMATOES, Pa. hothouse, per lb., 10¢-15¢; TURNIPS, N. J., ¼ bskts., white, 15¢-20¢; TURNIP TOPS, Pa. & N. J., bu., 25¢-40¢; SWEET POTATOES, N. J., ¼ bskts., reds and yellows, No. 1's, 75¢-90¢; WHITE POTATOES, Pa., round whites, 100-lb. sacks, No. 1's, \$1.65-1.85.

LANCASTER

Butter.—Country butter, 42¢-45¢; creamery butter, 34¢-38¢.
Eggs.—Fresh, 50¢-55¢.
Dressed poultry.—Chickens, \$1.25-1.50 each; springers, \$1.25-1.50 each; squabs, 25¢-30¢ each.
Fruits.—APPLES, 10¢-15¢; PEARS, 10¢-15¢; CRANBERRIES, 20¢-25¢; PEAS, 10¢-15¢; POTATOES, 15¢-20¢; RITA-BAGAS, 10¢-15¢; SPINACH, 10¢-15¢; TOMATOES, 15¢-20¢; TURNIPS, 15¢-20¢; MUSHROOMS, 25¢-30¢.

YORK

Butter.—Country, 40¢; separator, 45¢-50¢; Eggs.—Fresh, 15¢-20¢; pullets, 42¢-44¢; stumps, 30¢.
Poultry.—Hens, 20¢-24¢; springers, 20¢-24¢; dressed hens, \$1.25-1.50 each; springers, dressed, 65¢-71.25¢.
Fruits.—APPLES, 10¢-15¢; PEARS, 10¢-15¢; CRANBERRIES, 20¢-25¢; PEAS, 10¢-15¢; POTATOES, 15¢-20¢; RITA-BAGAS, 10¢-15¢; SPINACH, 10¢-15¢; TOMATOES, 15¢-20¢; TURNIPS, 15¢-20¢; MUSHROOMS, 25¢-30¢.

NEW YORK

Butter.—Higher than extras, 35¢-35½¢; extras, 31¢-32¢; firsts, 32¢-34¢; 90 score, 33¢; 88 score, 28¢.

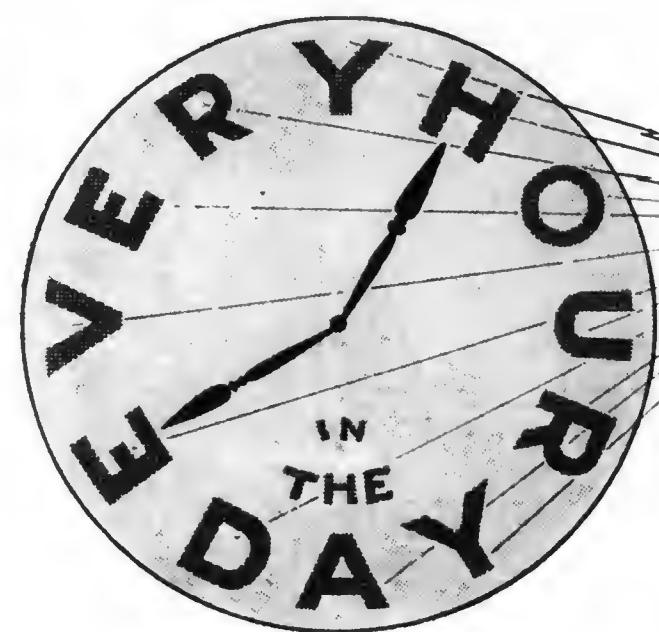
Eggs.—White, nearby and nearby western, selected extras, 32¢-35¢; extra firsts, 35¢-38¢; average extras, 45¢-50¢; mediums, 35¢-38¢.
Poultry.—Live, by freight, fowls, 17¢-22¢; chickens, 17¢-20¢; pullets, 24¢; old roosters, 16¢; turkeys, 15¢-20¢; ducks, 17¢; geese, 13¢.

Fruits.—APPLES, bskts., \$1-1.25; CRANBERRIES, Eastern, bu. bskts., \$1.25-1.50; PEARS, Eastern, bu. bskts., \$1.25-1.50; CABBAGE, nearby, cr., 50¢-75¢; CARROTS, State, cut washed bskt., 55¢-65¢; CAULIFLOWER, L. I., cr., 50¢-60¢; CELERY, State, best, cr., \$1.50-2.00; LETTUCE, Jersey, cr., 40¢-50¢; PARSLEY, L. I., 100-bchs., \$2-2.50; ROMAINE, Jersey, cr., 25¢-30¢; SPINACH, nearby, cr. or bskt., 75¢-81.25¢; SQUASH, nearby, marrow, bu., \$1.00-1.25; TOMATOES, Jersey, 10-lb. crates, \$1.75-2.00; TURNIPS, nearby, white, bskt., 20¢-30¢; WATERCRESS, 100-bchs., \$2.00; POTATOES, L. I., No. 1's, 150-lb. bskts., \$2.50-3.00; SWEET POTATOES, Jersey, No. 1 bskt., \$1.00-1.25.

PITTSBURGH

Butter.—Nearby bulk, 92 score, 36¢; 90 score, 33¢; 88 score, 28¢.
Eggs.—Nearby, firsts, 40¢-45¢; extras, 35¢-40¢; 90 score, 33¢; 88 score, 28¢.
Poultry.—Live, by freight, fowls, 17¢-22¢; chickens, 17¢-20¢; pullets, 24¢; old roosters, 16¢; turkeys, 15¢-20¢; ducks, 17¢; geese, 13¢.
Fruits.—APPLES, bskts., \$1-1.25; CRANBERRIES, Eastern, bu. bskts., \$1.25-1.50; PEARS, Eastern, bu. bskts., \$1.25-1.50; CABBAGE, nearby, cr., 50¢-75¢; CARROTS, State, cut washed bskt., 55¢-65¢; CAULIFLOWER, L. I., cr., 50¢-60¢; CELERY, State, best, cr., \$1.50-2.00; LETTUCE, Jersey, cr., 40¢-50¢; PARSLEY, L. I., 100-bchs., \$2-2.50; ROMAINE, Jersey, cr., 25¢-30¢; SPINACH, nearby, cr. or bskt., 75¢-81.25¢; SQUASH, nearby, marrow, bu., \$1.00-1.25; TOMATOES, Jersey, 10-lb. crates, \$1.75-2.00; TURNIPS, nearby, white, bskt., 20¢-30¢; WATERCRESS, 100-bchs., \$2.00; POTATOES, L. I., No. 1's, 150-lb. bskts., \$2.50-3.00; SWEET POTATOES, Jersey, No. 1 bskt., \$1.00-1.25.
Full-dressed turkeys 20¢, hog dressed 30¢.

W. R. W.



Electricity

serves both Farm and Home

with **LIGHT, HEAT and POWER**

Service that Satisfies

TODAY we expect electricity to be available twenty-four hours of the day for the service of industry, transportation, the farm, and the home. Yet it is only forty-eight years since Thomas A. Edison, esteemed as the father of the Electrical Industry, commenced distributing electricity in New York City.

It is relatively a few years since electric service was available only during a certain period of the day in many municipalities, and interruptions in service were common. Its use was chiefly for lighting and the rates charged were necessarily high due to small volume of use and high generating costs.

By constantly striving for higher efficiency through large generating plants, long distance transmission and the building up of a greater use throughout the distribution system, the Electrical Industry has taken service continually to more thinly-settled sections until today practically all villages and many thousands of farm and rural customers have service. The rates charged for current have been greatly reduced and so arranged that with increased use the cost becomes much less, with few exceptions dropping to 3 cents per K.W.H. or less after a certain amount has been used. To gain this efficiency and make these extensions, the Industry is spending approximately \$1,000,000,000 a year in the United States.

The Worth of Electricity

It is not the charge that the electric company makes for electric service but the work accomplished by the current used that determines its worth. Below we outline briefly some of the more common applications of electricity to the tasks of the farm and the home during the twenty-four-hour day, and we invite your own valuation as to what this is worth.

THE WORTH OF ELECTRIC LIGHTING IN TERMS OF safety from fire; prevention of accidents that occur through poor illumination; fuel saved; labor saved (commonly one-half hour or more per day); greater cleanliness; increased egg production; better eyesight and more enjoyment in the home.

THE WORTH OF A WATER SYSTEM IN TERMS OF labor saved in pumping or carrying water; increased live-stock growth and production; better living conditions in the home.

THE WORTH OF MOTOR POWER IN TERMS OF dependability, labor saved and doing away with drudgery when motors are used for the work of washing and wringing clothes, house-cleaning, sewing, pastry beating and operating fans, milking machines, meat grinders, tool grinders, corn shellers, fanning mills, feed grinders, wood saws and ensilage cutters.

THE WORTH OF HEATING APPLIANCES IN TERMS OF convenience, attractiveness, comfort, and labor and fuel saved in the use of the hand iron, waffle iron, toaster, percolator, heating pad, air heater and water heater.

THE WORTH OF THE ELECTRIC REFRIGERATOR IN TERMS OF the thousands of steps and the many dollars' worth of food saved, cool drinking water and more healthful food.

THE WORTH OF THE ELECTRIC RANGE IN TERMS OF quality of cooking done, the convenience and dependability of the automatic oven, the cleanliness of the utensils and kitchen with no smoking and smudging, fuel and labor saved since there is no fire to keep up, no ashes to remove, no blackened pans to scour.

THE WORTH OF THE ELECTRIC RADIO IN TERMS OF the pleasure and value derived through bringing into the rural home the finest musical and educational programs offered.

Electricity Earns a Profit

THESE are but a few of some two hundred uses to which electricity is being put about the farm and in the home. Those who are using electricity are in the best position to know what it is worth to them. Some farmers tell us that the lights alone are worth more to them than their entire electric bill; others say that they would not pump their water by hand for the entire cost of the electric bill; others say they would not like to continue farming if they could not have electric service. As we study the results secured from the application of electricity in the form of light, heat and power to the tasks of the farm and home throughout twenty-four hours of the day we are convinced that

"IT COSTS MORE TO DO WITHOUT ELECTRICITY THAN TO USE IT"

Published in the interest of Rural Electrification by the

Bradford Electric Company
Chester County Electric Company
Chester Valley Electric Company
Duquesne Light Company
Edison Electric Company
Edison Light & Power Company
Erie County Electric Company
Erie Lighting Company

Keystone Public Service Company
Luzerne County Gas & Electric Company
Metropolitan Edison Company
Northern Pennsylvania Power Company
Penn Central Light & Power Company
Pennsylvania Electric Company
Pennsylvania Power & Light Company
Pennsylvania Power Company

Philadelphia Electric Company
Scranton Electric Company
South Penn Electric Company
Southern Pennsylvania Power Company
Sullivan County Gas & Electric Company
Well-boro Electric Company
West Penn Power Company

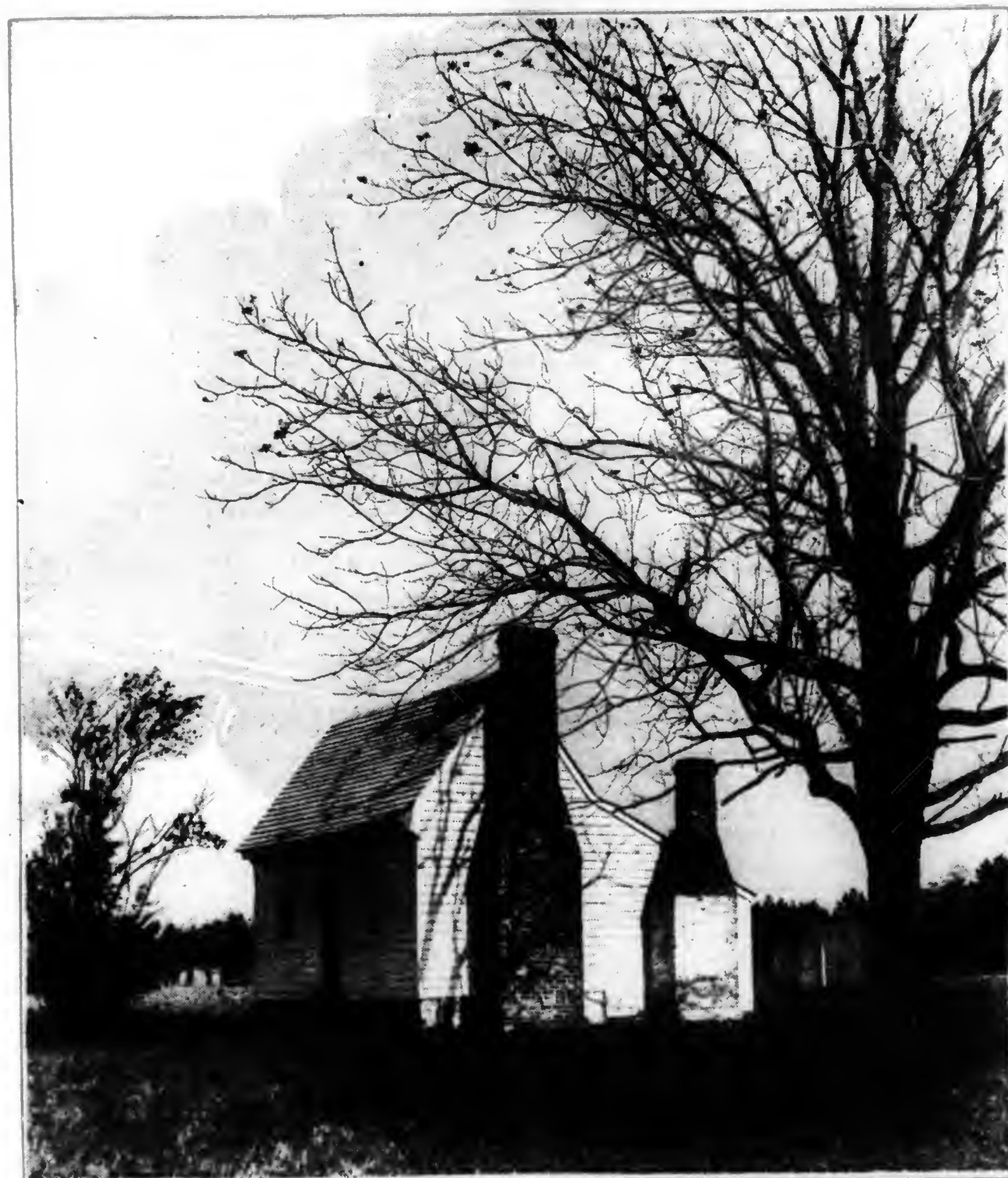
PENNSYLVANIA FARMER

Published Weekly

Established 1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

December 6, 1930



Birthplace of Dr. Walter Reed

Details about our Second Florida-Cuba Tour Page 8

Farm Facts and Fancies

By ALVA AGEE

ONE'S sympathy goes out to parents who have appreciation of the value of school training and have children approaching college age, but are not making anything more than a living from the farm that supports them. The lack of income is not a matter of poor farming but one of low prices. They want to give their children the best chance possible, and they are troubled because they cannot do more.

They cannot believe in school training more heartily than I do. Most young people should be urged to try for more school education than they get. Plenty can be said on that side, and it is said. On the other hand, it depresses those who must go to work without the education they want, and they feel that they are at a serious disadvantage. It is just as well to face this proposition and to say that a young man with the right kind of stuff in him may become just as good a farmer, and make as good a living from land, as the one who has had college training. It comes about from the nature of his business. He should realize this fact and have his ambition stirred.

No Trade Secrets

The methods of good farming are an open book. The neighbor who practices them, the best farm papers, the station bulletins that reveal facts, the plain, practical books by men who are specialists along various lines—all are teachers at one's elbow. Nature's ways of doing things are before him, and team-work with nature is about half the battle in farming anyway. Three-fourths of the value of college training does not lie in any special information brought back to the farm. It has big value, but not necessarily convertible into cash on the farm.

The great mass of farm children cannot go to college, and they need to see that their life-work on the farm offers a special chance to one who gets busy in educating himself. He has teachers, and nature is the best of them all. He can become a rather highly trained man in the business of farming.

Short Courses in Agriculture

Having stated the case fairly for the great mass of young people who cannot afford to prepare for college and take a four-year course, I do urge many of them to plan to take a short course of eight to twelve weeks at their state agricultural college. If they can manage in any way to take care of the expense of such a course they can make the investment very profitable to themselves.

The students in such a course get facts in the class-room they need and they get a still bigger return on their money and time through associations with teachers and fellow students. Such a course, short as it is, wakes them up to the possibilities in farming. They know where to turn for information when they get back to work on the farm, and there is inspiration to make a winning when they know personally a great number who are hustling just like themselves.

I know of nothing else in this world that broadens one's vision and puts determination into him to do his best, taking time and cost into consideration, as does a short course in agriculture for one who intends to farm.

About Feeding Wheat

Statistics can easily be misleading. The big shortage in the corn crop is now known, the hay crop is the smallest for a dozen years, the effect of the drought on pastures lengthened the feeding period, and we have dependable station data on the relative feeding values of wheat and corn. One would say that all this points to

heavy reduction of the wheat surplus through feeding. Of course a great lot of wheat is being fed, but there is an influence that we cannot measure. It is the force of habit that regards wheat as a cash crop—a means of bringing in some cash.

Corn would not be sold when it is needed for feeding because its use in feeding is the normal thing. The substitution of wheat isn't the normal thing to do, and the inclination is to do less feeding, sell at a sacrifice, and send the wheat to market to get a cash return. One may know that the wheat would take the place of corn, and that he would not sell corn if he had it, and yet may be inclined to go slow in converting his wheat into meat. Right here is a big factor in the wheat and corn situation that has not had the attention it deserves. Many a man will ease along with less grain and shorten his feeding period, sending wheat to market when he would not have thought of marketing corn if he had it.

That Debenture Plan

The Grange is our most influential farm organization. It accepted the so-called debenture plan when the world prices of wheat were much higher and when we had not learned how far European countries were willing to go to protect their own producers. We needed something done, and it was believed by some that there was a chance that a subsidy to our growers would relieve distress. Now it is much clearer than ever that the world can get along without any of our surplus wheat, if necessary, and is not going to put up with any dumping or anything that those countries regard as unfair to themselves. If there was a chance for the debenture plan, it has passed by.

I am mentioning this only to say that our short session of Congress should not get involved in such discussion of relief measures that appropriations would not be made and an extra session of the Congress would be forced on the country. We are on the way to climbing out of the business depression that robs farmers and everybody else of good markets, and the climbing will be better if we have no congressional discussions between next March and next December.

That climbing would be less important if farming could get its just due as a result of a summer of political agitation, but we have been trying that for years. The Farm Board inclines to go the limit under the law that created it, and why not let it do its best when there is no other best in sight? Surely we can see that the debenture scheme could not work out to the benefit of this country's agriculture right now. It would be far better to hold it over until the new Congress meets a year hence, and then more of us will be seeing that such a subsidy would do only harm.

ON THE COVER

ONE of the greatest contributions of science to human welfare was the control of yellow fever. The discoverer of the yellow fever organism, which made such control possible, was Dr. Walter Reed. He was born, 1851, at Belvoir, Gloucester county, Va., in the house shown on our cover this week. This humble cottage is vastly different from the famous hospital in Washington, D. C., which bears his name.



Farm Practice

By W. D. ZINN

Brief Answers

C. M. You are just fooling yourself when you say you would as lief have a ton of timothy hay as clover to feed to two-year-old steers. What is the use of our paying the expenses of running experiment stations if we are not to follow their teachings? Every one of these stations tells us that clover hay is better than timothy and that alfalfa is better than clover.

The Department of Agriculture at Washington, D. C., says that when timothy is worth \$9 per ton, based on its digestible nutrients, clover hay is \$14 and alfalfa is worth \$21.

J. B. If you have Canada thistles on your farm you have a pest that will be hard to eradicate. I have killed them by fertilizing the land so well that it would grow very heavy crops and thus I crowded them out. I believe the land prefers to grow a domestic plant rather than a weed and it will do it if we help it a little. Some say they have killed these thistles by sowing the field to alfalfa and cutting it three times. It would be worth trying.

C. R. If you think you cannot afford to buy a complete potato outfit and you cannot get a neighbor to go in with you and buy it I would advise you not to go into the business. Too many growers are well-equipped for you to try to compete with them with a half equipment.

R. W. If I believed my cow died with the disease known as "hollow tail" I would not tell my neighbors so. There is not a veterinarian in the land who believes that there is any such disease as hollow tail or hollow horn.

D. W. You say you do not want to kill your hogs when the moon is on the wane for fear the meat will shrink and you will lose a lot. Well, by all means do not do it; and you will be much happier. Strive to be happy especially since Christmas is so near at hand.

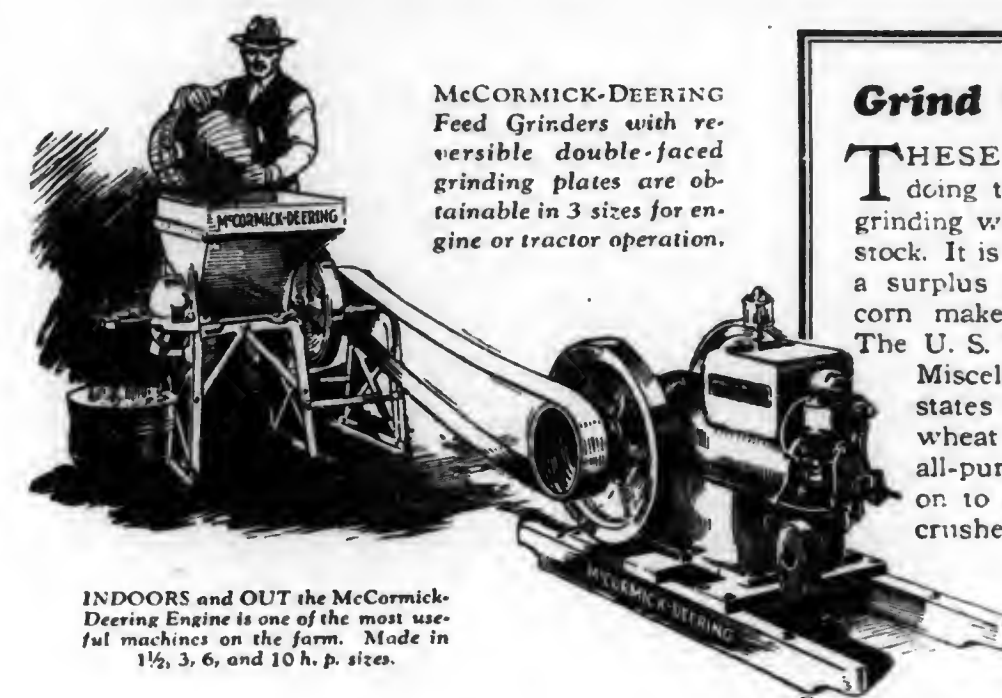
S. C. R. If those hogs are to be kept until the first of March you will need very comfortable quarters to keep them in. Remember that a certain amount of feed goes to keep up the animal heat and a board is cheaper than corn even if lumber is high. Your experiment station as well as your county agent will tell you that you cannot depend on corn alone to fatten them. Better trade some corn for tankage.

R. M. You say you want to sell your farm and move to a better community because you cannot get along with a certain neighbor. Do not do it. You will likely run up against the same kind of neighbor in the other community. Try heaping coals of fire on his old pate until he is burnt as bald as the editor of this paper.

G. M. C. You asked me what lesson I got from the recent election in West Virginia. I learned several things but two only will I mention, and they were that two or three men cannot run a state and that you can depend on the common people doing about the right thing.

H. F. W. Since you are going to be very short of feed if the grinding of the fodder does not cost too much I believe there will be big profit in it. Do not let the fodder stand in the rain too long before grinding it. If your cows eat only the husks and blades of the fodder they are getting only about one-fourth of the nutrients out of it. I cannot say so much for the timothy, for the old cow has a very good machine for grinding the hay. True it is old and may be out of date, for Adam's cow used it, but it still grinds.

SAVE Labor and Money with these handy machines



McCORMICK-DEERING Feed Grinders with reversible double-faced grinding plates are obtainable in 3 sizes for engine or tractor operation.

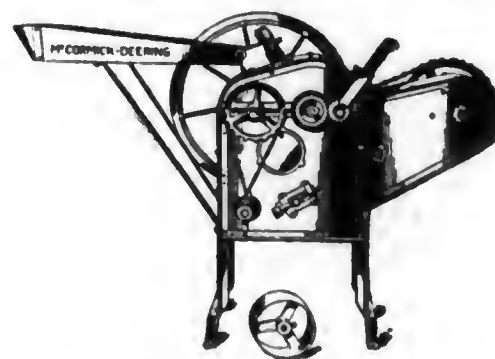
Grind Wheat for Feed

THESE days many farmers are doing themselves a good turn by grinding wheat and feeding it to live stock. It is highly profitable whenever a surplus of wheat and shortage of corn makes wheat the cheaper feed. The U. S. Department of Agriculture Miscellaneous Publication No. 26 states that a pound of cracked wheat equals a pound of corn in all-purpose feeding value. It goes on to say that wheat should be crushed or coarsely ground for live stock, and rather finely ground for dairy cows. It should be used with other elements to make a balanced ration.

Write for our special circular covering the feeding values of wheat

McCORMICK-DEERING Corn Shellers

A McCormick-Deering Corn Sheller will enable you to shell corn for seed, feed, or market at low cost. Built strong to give long service. The line includes shellers for hand, engine, or tractor power.



THE saving in time and labor, the economy, and the convenience of being able to grind your own feed and shell your own corn whenever you want to, more than justifies owning a McCormick-Deering Feed Grinder, Corn Sheller, and Engine. The small investment required to put these machines to work on your farm is offset many times over by the many advantages they offer the year around, and by the savings they effect.

Examine the models the McCormick-Deering dealer has on display. Ask him to point out the exclusive features, quote prices, and demonstrate for you.

Write for illustrated folders and read all about the many features of these money-saving machines

INTERNATIONAL HARVESTER COMPANY

606 So. Michigan Ave. of America Chicago, Illinois
(Incorporated)
Branches at Pittsburgh, Harrisburg, Philadelphia, Pa.
and at 98 other points in the United States.

McCORMICK-DEERING Feed Grinders • Engines • Corn Shellers

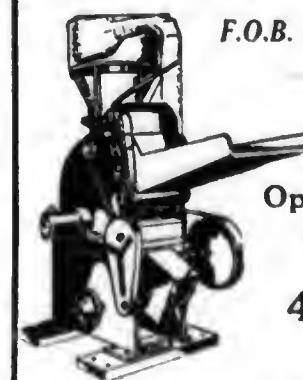
DELLINGER

Hammer Type

MILLS

Priced as Low as \$110.00

F.O.B. Lancaster, Pa.



Furnished with or without Automatic Feed Rolls and Governor.

Write for catalogue.

A. M. DELLINGER, Lancaster, Pa.

Farmers Need The Comfort And Protection Of The Old Reliable



Reg. U. S. Pat. Off.

Brown's Beach Jacket

Long wear, warmth and comfort—the features all farmers and outdoor workers expect in a working jacket—can all be found in Brown's Beach Jacket. It is made of strong knit cloth with windproof wool fleece lining, is cut to fit the body snugly, and can be washed without losing its shape. Three styles—coat with or without collar and vest.

A Brown's Beach Jacket makes a welcome Christmas gift.

Ask your dealer.

BROWN'S BEACH JACKET COMPANY Worcester, Massachusetts

I'll Pay You 5% MORE for Your Fur

Anyone who is honest will pay you full market value for your fur. But I'll pay more than that. I'll pay you an EXTRA 5% above market price on shipments of \$50 and up. If your skins are worth \$40 you'll receive my check for \$42.00. For \$100 worth I'll pay \$105.

I can afford to pay more because I'm the largest receiver of raw furs in the East. I have a tremendous demand for furs of all kinds. I pay the day your shipment is received. And I pay every penny—there are NO DEDUCTIONS for commission, handling, transportation.

If you want more for money this season slip coupon for my authentic price list, shipping tags and trappers' hand book. All FREE.

MR. GEORGE L. FOX (Personal), 216 W. 30th St., NEW YORK

Send me FREE items mentioned above. I want to make more for money this year.

Name _____

Address _____



If you tried to lift this Shorthorn Bull with your foot!

EDELLEN FAVORITE, Grand Champion Shorthorn Bull, 1929 International (after a drawing made from a photograph).

And yet the excess weight in ordinary boots makes you waste that much energy every day

THIS prize bull—Edellen Favorite, Grand Champion Shorthorn at the 1929 International—tips the scales at 2,250 pounds...

Every day that you wear ordinary boots, you lift more than that much weight with your feet! The strain on your energy is the same whether you do it bit by bit or all at once—whether you drag too-heavy boots around, or try to lift that bull.

If your pair of Goodrich boots weighs only four ounces less than your former pair of ordinary boots, you save lifting 2,420 useless pounds in a single day! For you cover at least 5 1/2 miles in a working day; you take at least 9,680 steps doing it. In ordinary boots, that means lifting at least 2,420 pounds unnecessarily.

Wear a pair of Goodrich boots! You will discover that they are not only light boots, but tough as well! The B. F. Goodrich Footwear Corporation, Watertown, Mass.

Goodrich

Rubber footgear for every member of the family—another B. F. Goodrich Product



Men's four-buckle all-rubber boot

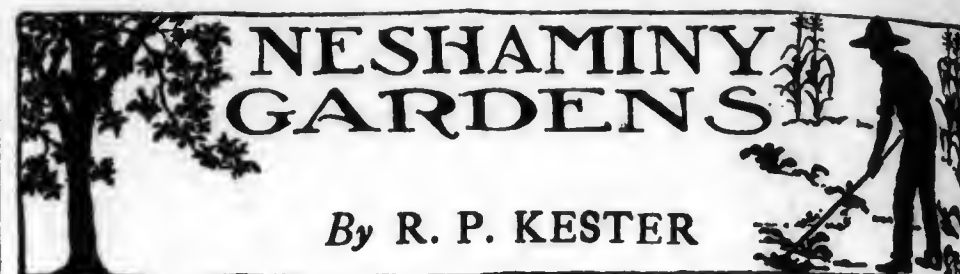


Women's Zipper-in swagder-tan



Men's 15-inch black Du Bois

LIGHTER! TOUGHER!



By R. P. KESTER

Profitable egg production comes from feeding Lay or Bust, the famous Park & Pollard original dry mash.

The successful poultryman's profit producer for a quarter century.

Dependable Feeds for Every Purpose

Poultry Feeds: Lay or Bust Dry Mash - Red Ribbon Scratch - Growing Feed - Intermediate Chick Feed - P & P Chick Scratch - P & P Chick Starter - Dairy Rations: Overall 2½% - Milk-Maid 2½% - Bet-R-Milk 20% - Herd Health 16½% - Milkmaid Calf Meal - Other Feeds: P & P Stock Feed - Bison Stock Feed - Go-To-It Pig and Hog Ration - Pigeon Feed - P & P Horse Feed - Pocahontas Table Corn Meal.

I HAVE mentioned several times the fear that communities were disintegrating; that rural neighborhoods were not holding enough get-together affairs to keep up a proper degree of acquaintance and friendship for best results, the results being an ability to cooperate effectively. In some respects nearly every community—rural as well as small town—is overorganized. That is, there are numberless clique organizations, organizations embracing a few of the total number of the people in a community.

There are the fraternal organizations, the many and various church activities, the women's clubs, men's clubs, card parties—each of these having standing committees—in fact there are so many small things going on that there are scarcely enough days or nights in a week to get them all in. These all may be necessary (although I doubt it), but in most places there are few opportunities for the meeting of all the people of any given community.

In our town, recently, we had a rather novel get-together affair which seemed to be highly successful from every point of view. The Chamber of Commerce of the town—a place of about 2,000 inhabitants—got up what was called a community exposition. The second story of a big garage was rented and the space divided off into "booths" about eight by eight feet.

There were 28 of these booths, and a side room 13 by 31 feet in size which was devoted to farm exhibits. Every square foot was filled with the best the stores had to offer and the finest the farms could produce. The exposition was open every evening during the week, and capacity crowds from the town and community attended each night. An admission fee of ten cents was charged in order to keep repeating boys from over-crowding the place.

The booths were filled with the different lines carried by the merchants of the place—automobiles, radios, heating plants, drug stores, stationery and gift shops, baking plants, fuel materials, plumbing fixtures, house construction, shoe stores, clothing stores, food products, poultry and stock feeds, while the two banks each had a booth fixed up to represent their services to the community.

In the farm products section was a display which interested and surprised every visitor. People thought it hardly possible that, owing to the drought of the year, such perfect specimens of fruit, vegetables, potatoes and grain could be got together. In addition to these products were eggs, milk, alfalfa, etc. The products were judged by the county agent and ribbons awarded for first, second and third winners. The shortness of time for preparation and the lack of space prevented an even larger exhibit of farm products.

In addition to the things to be seen many novelties were given away by the merchants, prizes awarded each night, and musical and entertainment features provided all the time. A large loud speaker was hung in the center of the room and happy running comments and announcements made so that everybody could hear.

I have gone into some detail in describing this event, not for the purpose of complimenting our community, but as a suggestion to other neighborhoods. Such a late fall or winter show could be staged almost any place if promoted by a good live organization. Whether it is started

by a trade body, a Grange or other farmers' organization, the object to be kept in mind is the creation of good will and better understanding between all the people of a given community. Everybody was surprised at the evidence of success in this line at our fair. Lots of people attended every night just to see and rub elbows with other people. It is unanimously agreed to repeat it next year.

Up to now, November 22, the wells and springs have not shown any effects of the very fine rains we have had the past week. The ground was so dry for such a great depth that it absorbed all the moisture that fell and none reached the underground water courses. However, it has helped in some instances for this reason. When cloudy weather or top-soil moisture stops steady evaporation, the under-ground supply of water has a chance to fill up springs and wells. This will answer the question asked sometime ago as to why a spring would sometimes start to flow after being dry, even when no rain has fallen.

The quality of the farm products at the show mentioned above indicates that eastern Pennsylvania did not suffer to the same extent as many other places during the drought of the past year. Enough rain fell to keep plant life supplied pretty well, although the water supply did suffer. Wheat, although sown in dust, is making a good showing now in spite of its slow germination.

Friendly Talks

By Edgar L. Vincent

"LET no man take thy crown." Just a scrap out of an old, old Book. I am sure the men and women to whom it was addressed understood what the meaning of the words was. It was a warning that they should live so good, so true and so upright that nobody could say anything against them on the score of their fidelity to all that was best and most worth while.

If I read the signs of the times aright there are those today who would try to rob the farmer of his crown. How often we hear men say, "Farming is the rottenest business a man can go into. No money in it. I never will advise a boy of mine to be a farmer. Anything but a farmer." And the words have been spoken so many times that thousands are coming to believe them. If ever anything was calculated to rob a farmer of his crown that is it.

"Hold fast to that which thou hast," the language of the old Book runs. "Hold fast," never let anybody make you ashamed that you are a farmer. Farming has its ups and downs. So do all kinds of business. Money may be scarce. That is no disgrace. Thousands who are not farmers are tramping the streets in search of work without a penny in their pockets. I honestly believe farmers are the best off of any one. They have a place to stay, kind friends to encourage them and the earth has not yet refused to bring them something to live on.

Hold fast! Things will change before long. Rifts are breaking in the clouds even now. Let us say a good word for the farm every time we can, and the chances will come when we often think we think.

MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

PENNSYLVANIA FARMER
Established 1877
Consolidated with
PENNSYLVANIA STOCKMAN and FARMER
Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of March 3, 1879.

President - Arthur Capper
Vice-President - T. D. Harman
Editor-in-Chief - George M. Slocum
Manager - E. S. Bayard
Neff Laing

New York - 420 Lexington Ave.
Chicago - 203 No. Wabash Ave.
Detroit - 1632 W. Lafayette Blvd.
Philadelphia - 1201 Chestnut St.
Cleveland - 1011 Rockwell Ave.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Pittsburgh, Pa., December 6, 1930

No. 23

Can the College Prevent Farm Failure?

By W. R. WHITACRE

ARE the agricultural colleges to blame when their graduates fail on the farm? Interviews with college-trained farmers indicate that in the majority of cases the college would share a portion of the responsibility. The chief causes for failure as given by ten of these men were insufficient capital, excessive overhead and a lack of experience and training in actual farm practice. Most of the men who failed on the farm have entered other lines associated with farming and have been successful. The college course has made them eligible and has prepared them for such positions as county farm agents, vocational teachers, cooperative managers and foremen, but it has not fitted them for practical farming.

One man who failed on the farm and who has been exceptionally successful in agricultural extension work, admitted that he could not hold his position without the degree, or the training that he received at college, but he believes that there is much that could be taught which would help prevent failure. He also stated that his failure has helped him in the extension work since it gave him a sympathy and understanding of the farmer's problems which he could not have gained any other way.

Easy on Paper

"For example," he said, "we had courses in farm management in college, but they were like arithmetic problems. When income fell short of what was needed we either grew more crops and increased the returns, or we cut down the overhead. It is very simple on paper, but it is a far different matter when you try it on the farm. Most of these problems assumed that your living came from the farm and did not include enough personal expenses. There were no bills for doctors, groceries, clothing and the innumerable expenses which we have in actual life."

Another man who made one failure on the farm and who is now slowly working his way to success on the same farm after spending five years as working manager for a large truck farm criticized the policy of the colleges in selecting their instructors and professors.

"The proofs are not practical," he complained, "but it is not all their fault. They must live just the same as the rest of us and to advance they must add degrees. The number of letters after the name is the yardstick by which they set the salary."

They graduate from the college with their B. S. degree, they go to another and in a few years have their M. S. and after a few more years of teaching or research they blossom out with a doctor's degree. Then without a season's practical work on the farm they teach such subjects as farm management, agronomy and marketing. This system develops teachers who over-emphasize the theory and they are unable to show how it can be applied under real farm conditions. There are many exceptions to this in the

agricultural colleges, but it is one feature that was most criticized. Another point which practically all ten men mentioned was the tendency for professors to tell of the exceptional farmer and the big profits he makes. Farming was painted as a rather rosy picture in which success awaits the man who uses scientific methods and combines them with a little hard work. There was little mention of the failures and none of the reasons why they failed. As one man said, "I figured all farm failures were due to ignorance or laziness, but I have changed my mind about that. Did you ever hear any professor say that it is practically impossible for a man to operate a farm successfully when he borrows all the purchase money as well as that required to stock it? It sounds sort of silly, but that is just about what I tried to do, and I had it all worked out on paper before I started."

Aims and Essentials

It was not the fault of the agricultural college that the graduates lacked capital, but it should have placed more emphasis on financing and by actual illustration pointed out the failures that result from lack of capital. The college will claim that it had no responsibility for the excessive overhead, but in many cases this was due to the desire for the latest agricultural improvements as advocated by the college. The student is taught that every farm home should have a bath room, modern electrical appliances, attractive furnishings and all of the other conveniences. His cows should be pure-bred, his poultry from heavy-producing strains and he should have modern barns with labor-saving equipment. Farm machinery should be of the most improved type, as it is most efficient and saves labor. It is well for the college to set forth these things as aims and ideals toward which to strive, but it seems that many students believe it is necessary to have them all at the start and in obtaining them they sink hopelessly in debt.

For example, one graduate entered the poultry business and invested thousands of dollars of borrowed money in modern poultry houses and equipment. The houses were designed by experts and all of the equipment, such as drinking fountains, nests and feed hoppers was of the best quality. He understood poultry raising, but his overhead was so great that he was unable to carry on with his limited capital. Another grad-



The farm-bred boy gets an early start in agricultural education.

uate had less capital and credit when he went on the farm. He, too, wanted modern buildings, but his father who had financed him advised against it. He took the old barn and with some second-hand material remodeled it. He built his own feed hoppers and fountains and they answered the purposes. He continued to remodel the barn as the flock became larger and he has made a success of the poultry business.

The college-trained farmers who have succeeded have gained practical farm experience either before entering college or before they started in business for themselves. In each case it was necessary for them to gain this essential training outside of their college course.

One graduate who has made an outstanding success as a farmer said, "I believe that it is foolish for a man who has not had considerable practical farm experience to enter farming for himself after graduation. A few summers on the farm are not enough experience to fit a man for farming. I like this farming game, but the fact that you graduate from a course in agriculture does not make you a farmer."

Greener Pastures

It was this lack of experience in what is often called "dirt farming" that was responsible for some of the failures, and often this is combined with other handicaps, such as lack of capital. The farm has an appeal to the town or city boy that often causes him to enroll in the agricultural course and to enter the business of farming. Fathers in other lines of work content on the joys of farm life and in many cases encourage their sons to farm, since it is what they imagine they would like to do. There are students in the agricultural courses who never lived on a farm and who have never milked a cow, harnessed a horse, or plowed. Some of them want to farm, but they do not fully realize the hard work, practical experience and skill that are needed to make any degree of success.

Practically all of the agricultural colleges have farms where some practical work is done, and it is possible to add more of this work during the later years of the course. The poultrymen could take over the management of a small flock, the dairymen could share in the management and operation of the college herd, and the horticultural men could plan, plant and care for gardens or care for orchards. This work is done to a degree in most colleges, but it could be

(Cont'd on page 26.)



These young farmers in an Erie county potato project learn the practice and theory of producing certified seed.

PENNSYLVANIA FARMER

Published Weekly
Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
T. D. HARMAN, Vice-Pres.
GEORGE M. SLOCUM, Vice-Pres.
NEFF IAINO, Manager

EDITORIAL STAFF
E. S. HAYARD, Editor-in-Chief
C. L. WHITE, Editor
M. C. GILPIN, Editor
MILNS HONST, Field Editor
G. W. HARRIS, Field Editor

Editorial Office: PITTSBURGH, HARRISBURG, PHILADELPHIA
Contributing Editors: R. P. Kester, Alva Agee, L. W. Lighty, W. D. Zinn,
H. U. Blasingame, J. F. Shapley, F. L. Beatty, J. G. Lyman,
S. W. Fletcher, H. C. Knudsen, A. A. Burland,
R. L. Beharling-Hansen, Gilbert S. Watts,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Canadian subscriptions \$1.00 per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for livestock and classified advertising. No discount, funeral or wedding advertisement inserted at any price.

Member Agricultural Publishers' Association,
Audit Bureau of Circulations.

Volume 103, No. 23

Established 1877

CHEAPER FEEDERS

THE average cost of the steers taken out of the Kansas City market by feeders during the past summer and fall was \$6.90 per cwt. Last year the average cost was \$9.96 per cwt. This year's purchases by feeders included fewer heavy, fleshy and consequently high-priced cattle than last year. Some of the cheap feeders have come back to market at a profit, and we hope the rest of them will do as well or better.

A TRUE PROPHET

TWO years ago last spring Wayne Dismore, Secretary of the Horse Association of America, predicted that within five years wheat would sell at 75c per bushel at Chicago. He based his prophecy on the increasing area available for wheat in consequence of the lesser area needed to raise horse-feed. His prediction has proved to be correct, but so far as we can ascertain he is the only feller who is feeling very good over it.

CHESTNUT SEEDLINGS

THE United States Department of Agriculture has sent to the experiment stations of seventeen states blight-proof chestnut seedlings raised from nuts collected in Japan, Korea and Formosa by its plant explorers. These and other trees will be tested here and some of them promise to solve the problem. An occasional blight-proof or blight resistant tree is found in this country. Probably the chestnut will come back where conditions favor it.

HOW TO FEED WHEAT

THE Federal Farm Board has just issued a bulletin entitled Practical Experiences in Feeding Wheat. It gives the results obtained by twenty-five experiment stations in feeding wheat to cattle, hogs, sheep, horses and poultry—all favorable. Mr. McKelvie has a page all to himself to tell how ex-President Coolidge consumes wheat mixed with rye, both in solid form. It may be of interest to note in connection with wheat feeding that both Chairman Legge and Member McKelvie accept an estimate of 200,000,000 bushels as the amount of wheat to be fed this year.

APPLES OF MEMORY

LAST month our old friend D. A. Arnold of Mineral County, W. Va., remembered us with a basket of Milan apples as is his custom. At the Pittsburgh store we found a long bunch of old-fashioned yellow-bell flowers and brought them. On hunting the

other day in Washington county, Pa., a companion found a tree of Rambos and gave us some. The other day an associate came in and laid down a Sheepnose on our desk. If anybody has a better collection of old-fashioned apples let him say so. Redolent of memories are all of them and better for that reason at least than anything on the market today.

MORE LEGISLATION?

THREE items of legislation of special interest to agriculture are said to be on the program at the session of Congress which began this week. They are (1) further regulation of commodity exchanges, particularly to curb short selling; (2) seed and feed loans for farmers in drouth areas; (3) further appropriations to the Federal Farm Board for the purpose of stabilizing the wheat market. The first and the last of these will probably prove more detrimental than beneficial in the end. Continued and increasing interference with the commodity exchanges will probably deprive us of our greatest commercial blessing, a free and open market. Prolonged interference with the wheat market is just as likely to result in ill as in good to producers.

A TAX ON FLOUR

GOVERNOR CHRISTIANSON of Minnesota proposes a federal tax of \$2 per barrel on all flour milled for domestic use, the proceeds to be divided among wheat growers according to the amount of grain they market. This proposition is like several other relief plans in that it ignores the fact that consumers vastly outnumber producers, and the majority is not likely to sanction a tax on its bread for the benefit of the minority. Human nature is not so constructed as to stand such strains, but several classes of our relievers seem to be unaware of any danger in that fact.

DEAR TALK

THERE are at least two kinds of talk and talkers are responsible in part for the depreciation in the value of farm property in recent years. One kind of talk is that which leads the public to believe that a farm is a liability rather than an asset. There has been so much of this, on the platform, in the press and in Congress, that investors have been talked out of land, leaving only those to buy it who can operate it themselves. In the past every bargain in farms was picked up by somebody, a banker or a merchant or a lawyer, anybody who had funds to invest. Practically all of these former buyers of farms have been talked out of the market. The other kind of talk is that which leads to public debt regardless of the ability of the local unit to pay it. There isn't any doubt about public improvements being desirable, but they should always be made with proper consideration of the taxables in that unit being able to pay for them. The too heavy tax burden assumed in many places falls too largely on real estate and on rural real estate. We are told that talk is cheap, but the kind so prevalent in recent years is proving very costly to owners of farm property.

FIVE TRENDS

THE suit over the Consent Decree brought out some interesting evidence about the distribution of food, a subject in which all producers are concerned. Recently one witness cited five distinct trends or tendencies in food distribution: (1) The increasing volume handled by chain stores, which are of two classes, the 6,000 chain-store companies which handle 55 to 60 per cent of the retail food business and the 800 or more voluntary or cooperative chain systems which handle about 35 per cent. (2) Mergers and consolidations among manufacturers or pro-

cessors of foods; or centralized selling of the products of such concerns as canning companies. (3) Sale of foods, through cooperative organizations of producers, direct to the consumer. (4) The increasing number of combination food stores, which are growing in favor among consumers, who like to buy all classes of foods at one time and place rather than at different times and places. (5) The quick freezing of meats and fish, whereby the consumer may have prompt service and the distributor need not be an expert in cutting and otherwise preparing the product for use. There can be no question about the existence of all these tendencies, but it is impossible now to estimate the effect of them on the business of distribution, or on the business of production either.

IN THE DARK

SINCE the Grain Stabilization Corporation has again gone into the market as a buyer of wheat various estimates have been made of its holdings, most of them around 100,000,000 bushels. There should be no need of any guessing about it. The Corporation should make public statement of its operations at the close of each week if not more frequently. It is a public agency, operating with public funds, and the public is entitled to know what it is doing, without waiting for an annual report or for an occasional statement by Mr. Legge. There is and can be no valid reason for any such public agency working in the dark, no matter how good its motives may be.

A SAD COMMENTARY

IN his annual address the Master of the National Grange, Louis J. Taber, said in discussing grain marketing: "It is a sad commentary on our present boasted wheat marketing program that during the period of agriculture's greatest depression, and the grain growers' consequent distress, the Chicago Board of Trade erected a new building, lifting its head forty-four stories above the streets of Chicago and costing over twelve million dollars, while the producer suffers near annihilation. And yet this building was erected out of profits to those who add little to the actual value of the grain the farmer produces."

Let us take a look at the facts in this case. In 1880 the Chicago Board of Trade bought the site of its present building for \$48,000 and erected thereon a building which was used until December, 1928. In the forty-eight years land values in Chicago's business district increased to such an extent that this land was appraised at \$11,500,000. It is not economical to maintain an old and comparatively small building on land so valuable, so a new one was proposed and a life insurance company offered to finance the new structure to the extent of 50 per cent of the combined value of the land and the building to be erected thereon. The new building cost a little less than \$12,000,000, making this combined value about \$23,500,000. Half of this sum was borrowed of the life insurance company on first mortgage. The rest was borrowed also by the sale of bonds secured by a second mortgage. The building is occupied mainly by business and professional men, and the rentals are intended and "confidently expected" to cover taxes, maintenance, interest and bond retirement, and besides to give the Board of Trade its quarters rent free. In other words, instead of being a tax on marketing the new building supplies a profit place rent free. Instead of being evidence of the profits in grain marketing it is evidence of increasing land values, and its total cost is covered by first and second mortgages.

"It is a sad commentary" indeed, when the Master of the National Grange in his official annual address ignores facts and makes appeal to suspicion and prejudice.

New Jersey Farm Comment

By G. W. HARRIS



David R. Johnson of Stockton, New Jersey, won the \$1,000 prize offered by the Kansas City Star for the outstanding student of vocational agriculture in the United States. The award was presented at Kansas City, November 18th, by Governor Caulfield of Missouri.

rowed, a little over five months ago, Mr. Jager entered them in the Maryland Litter Contest which is sponsored each year by the Maryland Stockmen's Association and which has for its goal "the production of a litter of hogs weighing at least 1,500 pounds at 150 days of age."

Mr. Jager's heaviest litter consists of eleven pigs weighing 2,325 pounds and the nine animals in his second litter tip the scales at 1,853 pounds. Both litters were raised in the open field although, owing to the drouth, they had very little grass feed. Their gains, therefore, were made principally on ground wheat supplemented with fishmeal and other feeds.

In addition to Mr. Jager's fine showing, Claude Cissel, Highland, Md., also deserves recognition for good work in the contest thus far. Mr. Cissel has two litters that take second position only to those of Mr. Jager, the weights of these two lots of animals being 1,839.5 and 1,776 pounds each. Hence, it is expected there will be quite a spirited race for first honors in the litter contest this year which offers \$800 in prizes. This year there are 33 entries in the contest.

THE value of ventilation in poultry houses is generally admitted. Since it gets results perhaps we need not question the cause, but investigators at the Ohio Experiment Station have been looking into the matter and their conclusions may be of interest to New Jersey poultry keepers. They say:

"The popular viewpoint that ventilation of poultry houses is necessary to provide fresh air and to prevent dampness may be disregarded. It is now thought that the main function of ventilation is to maintain the desired uniformity of temperature within the house. Dampness may be regarded as practically harmless when compared to sudden temperature changes. In the opinion of D. C. Kennerly, in charge of poultry investigations at the Ohio Experiment Station. This idea was substantiated at the Experiment Station's poultry plant during the winter of 1929 when the ventilators and windows were regulated according to this viewpoint, with the result that the birds were unusually free from respiratory disorders.

"A uniform temperature can best be maintained by having poultry houses properly insulated and arranged so that they can easily be shut tight when weather conditions warrant it. New poultry houses are being lined or insulated and older poultry houses are being remodeled to accomplish this."

We have been requested to change our ideas about poultry management several times in recent years. Only a short time ago free range and exercise, enforced if necessary, were regarded as essential to the life and happiness of hens. Now they may be jailed for life and still shell out breakfast

food in abundance. It is easy to believe that sudden changes in temperature are harmful, as the Ohio investigators state, and perhaps more harmful than dampness, but we doubt if any birds enjoy the latter unless they have web feet.

HEAT is applied to hotbeds for the purpose of germinating seeds and starting both tender and hardy plants early in the spring when the outside temperature is cold, says C. H. Nissley of the New Jersey College of Agriculture. Sources of heat for hotbeds include manure, hot water, hot air, and electricity.

Manure-heated hotbeds receive their heat from decomposing fresh horse manure. From 10 to 18 inches of this fresh manure is placed in the frame and firmed. Over it is spread 4 to 6 inches of good soil. As the manure decomposes, it gives off heat and vapor for two to five weeks, depending on the amount of manure used. Manure-heated beds were universally used years ago, but recently they have given way to hot-air and hot-water heated beds, except where small quantities of plants are started.

Hot-air or flue-heated hotbeds are constructed so that the heat is obtained from burning wood in a large fire box. The smoke and hot air are circulated under the entire bed, providing enough heat to germinate the seeds. The heat in these beds is controlled at will. Such hotbeds are of permanent type and, if built well and according to instructions, they will last for 20 to 30 years. This type of hotbed is used largely for growing sweet potato sprouts in New Jersey, but it also may be used for starting other vegetable plants.

Hot-water-heated hotbeds are becoming more popular each year for the growing of plants. Although more expensive to install, the temperature of the soil can be controlled at will. One and one-quarter-inch pipes are placed every 12 inches apart under the bed and a steady supply of heat may be maintained.

Electricity is being used successfully in some parts of the country for the heating of hotbeds. Where the cost of electricity does not exceed 3 or 4 cents a kilowatt hour, the expense of installation and operation, over a period of five years, is about as cheap as where manure is used.

Blueprints giving construction of flue-heated and hot-water-heated hotbeds may be obtained by New Jersey residents from county agricultural agents free of charge.

PROF. W. C. Thompson and L. M. Black, poultry authorities, state that New Jersey's once important turkey growing industry is undergoing a successful revival. In the 30-year period from 1890 to 1920, New Jersey's turkey population was reduced from 162,000 to only 8,000 birds, and this serious reduction was brought about almost entirely by the losses, or fear of losses, from the blackhead disease.

Experiment station workers found that blackhead could be prevented by growing the poult on clean ground and, more recently, they found that the rearing of these birds on wire platforms was an even more certain method of prevention.

At present there are flocks of turkeys in the counties of Passaic, Monmouth, Morris, Somerset, Burlington and Ocean. On virtually all of these farms, according to Professor Thompson, old methods of rearing poult have given way to the new. The nervous and usually belligerent turkey hen is no longer allowed to hatch her eggs and lead her brood about the countryside in search of food. In her place have been substituted the inanimate but more efficient incubator and coal burning brooder stove.

These appliances make it possible to hatch and rear thousands of poult where formerly only dozens or hundreds were kept. Instead of allowing their poult to range over the fields, many of the New Jersey poultrymen keep them confined to small enclosures and on platforms, which provide the most sanitary environment.

Such birds are, for the most part, fed on grain according to Professor Thompson. This complete control of their rations has been found of great advantage in producing high quality turkeys for holiday trade. Professor Thompson estimates that more than 25,000 turkeys have been grown in New Jersey this year, which is an increase of nearly 10 per cent over last year's production.

LILIES set out this fall should be heavily mulched to protect them from frost, says A. C. McLean of the New Jersey Experiment Station. A number of lilies are hardy, but all of them will do much better if the soil in which they are planted is mulched to prevent freezing.

Building paper or some other material that will shed water also should be placed over lilies, especially the Japanese varieties. This precaution will keep excessive amounts of water off them, and thus eliminate a cause of winter-killing.

You're Invited to Florida and Cuba with Us

Here Are the Plans for Our Second Winter Vacation Tour for Pennsylvania Farmer Readers

IN a recent issue we announced our second farmers' winter vacation tour to Florida and Cuba to take place next February. This will be conducted like last winter's trip, with the idea of giving everybody a good time and more than their money's worth. If any of your neighbors were on the 1930 tour they can tell you if we succeeded in achieving that ambition. The tour this coming year will take in some new territory and also include all the high points of the former event.

This winter as usual the party will travel by special all-Pullman train which provides all the comforts of home without its worries. We will do the worrying. The train will leave Harrisburg and Philadelphia on February 3rd and return on February 14th. Its passengers will visit the most interesting cities and communities of Florida, cross to Cuba by boat and spend two days and one night in and around Havana.

Leaving Washington at 3:30 p. m. on February 3rd we shall reach Jacksonville about noon the next day. Here the fun begins with a trip through the residential and business sections of this gateway to the Far South. Jacksonville is not "just another city." Listen to what a press agent says about it: "Here is one of the most cosmopolitan cities in the Southeast, piquant and serious, modern as New York, with a background of ancient America; thundering with traffic, glorious with parks and countless river vistas." We hope he'll remedy the situation by putting a muffler on the thundering traffic. Like New York Jacksonville once had a Bovey, but now we are told it is all sunshine and honeysuckles. We shall investigate the situation next winter and possibly propose a law to limit the sunshine if we find more than northern folks can enjoy in February.

From Jacksonville we shall cross the St. John's River on a splendid new bridge which spans that stream and take a 40-mile motor trip to St. Augustine, oldest city in the United States.

Three Hundred Years Ago

St. Augustine has other things to its credit besides old age. It has preserved landmarks which carry us back three centuries when bewhiskered "dons" were combing the country and disturbing the dreams of its natives for "gold—gold, always gold, glittering, gleaming, elusive and deluding gold." We are told that the greed for gold is the root of all evil, but the ambition to attain it paved the pathway for the development of a great nation. The ancient gates which guarded the entrance when St. Augustine was a walled town are still to be seen. We shall also inspect the old Spanish slave market, but we cannot and do not care to bring back the tragedies enacted there in the "good old days" when men were madder for gain and gold than they are in these much-abused times. Other places of historic interest in St. Augustine which you will not want to miss are Fort Marion, which was built of coquina rocks by the Spaniards, the ancient cathedral, the beautiful Flagler hotels, and the fabled Fountain of Youth, which is as old as the hopes of mankind.

Returning to Jacksonville for the evening we shall entrain and reach Gainesville the following morning. Here is located the University of Florida and the state Experiment Station, where about everything which grows in Florida is on display and about everything grows there except Polar bears and icebergs. Tung oil groves and an oil-crushing plant here will be of especial interest to northern folks. This oil, which is used in paints and varnishes, was originally brought from China.

The next day will see our party at

Ocala, seat of the famous Silver Springs, a body of water so clear that the fish have no privacy but may be seen from our glass-bottomed boats nosing around among the pebbles looking for food, playing marbles or just wasting time, as fish and folks have a way of doing in Florida. Regarding this spring, or lake, or whatever you want to call it, one visitor says, "England, France, Germany, Italy, Spain, Switzerland, Canada and most states of the United States. I have seen the leading wonders of them all; but Silver Springs remains the most enchanting wonder of the entire lot. There is no describing it. It must be seen." Like Barney Sealley's half-breed hound which chased a rabbit around Hardscrabble hill so fast that the fur was singed off, nobody would believe it until they had seen it, and some not then.

Ocala is in Marion county, modestly called "The kingdom of the sun." It is a section of natural resources in soil and climate, and splendid dairy herds, poultry, vineyards and citrus fruits attest to the fact that these resources may be developed with profit.

Sarasota is the next stop. The farmers' vacation special is scheduled to reach here early on



Here's part of our last year's party under the palms and Spanish moss of Marion County, Florida.

February 6th. Sarasota is the winter home of Ringling Bros. Circus, the Ringling Museum of Art and the Palmer Development which interested our folks so much last year. The circus will be fun, and we may enjoy the views of the animals in cages more than the sights on Sarasota Beach, but we plan to see both.

Some of the biggest citrus groves in the world are in the vicinity of Bradenton, Manatee and Palmetto. Thousands of acres of growing celery and lettuce are also to be seen in this great produce section. Special arrangements have been made to show our party this region by motorcar.

Everybody knows somebody who has been to St. Petersburg in winter. If the tales they tell are half true it is a place worth going far to see. And we shall see, for two days and a night will be spent here, with special sightseeing trips and other entertainment arranged to give us all the most pleasant and interesting visit to this winter resort. St. Petersburg is noted for its hotels, golf courses, pelicans, etc., but the thing which interests us most is that it is the world's greatest horse-shoe pitching place. The champions become so expert that it is no fun to watch them, since they make ringers every time.

State fairs in summer are common events, but a winter state fair is so unusual in the experiences of our folks that we thought they would like to see the great Florida State Fair, which will be held at Tampa during the week we are in the South. So we have arranged the schedule to include this event. The kinds and profusion of fruits and vegetables on display will be a revelation.

For Readers' Benefit

This hasty review of a few highlights on the trip is inadequate to give an idea of the things and places to be seen—and we have not even mentioned such well-known places as Miami, West Palm Beach, or Cuba, all of which will receive due attention, but which cannot be described here.

But we must not neglect the B&B Singing Tower, the Bird Sanctuary and Mountain Lake, which are located near Sebring. This is said to be one of the most beautiful places in the world, at least nothing of its kind is found elsewhere on this continent.

This tour is sponsored by Pennsylvania Farmer, cooperating with the Seaboard Air Line and Pennsylvania Railroads, for the benefit of readers. Reduced rates have been granted by railroads which make the trip much cheaper than it would be for an individual going alone. The price per person is \$197.50 and it covers everything, including side trips and special entertainment that could not be had by one person at any price. If you are interested in going along with the crowd, which we promise will be both sober and good natured, just fill out the blank on this page and mail it to us.

M. C. Gilpin.



The Pennsylvania Farmer Special in Florida last winter.

Our Trip to the Sunny South

The tour starts February 3rd, returns February 14th. We'll see Florida from end to end, and Cuba besides. We'll travel, uncrowded and unhurried, by special all-Pullman train. The tour managers will make all arrangements, pay all bills, do all tipping. No frills, but congenial company and the best of food and accommodations everywhere.

The total cost will be \$197.50. That covers meals, hotel—everything—from the time you board the train at Harrisburg or Philadelphia. You may make reservations now by sending a reservation deposit of \$20 per person. Or mail the coupon for further details.

Four Manager, Pennsylvania Farmer,

2301 Penn Avenue, Pittsburgh, Pa.

Please send me, without cost or obligation, booklet describing the tour to Florida and Cuba sponsored by the editors for Pennsylvania Farmer readers.

Name _____
 Town _____
 County _____ State _____
 Kindly send the booklet also to the following who may be interested:
 Name _____
 Address _____

John Imberlay, Trustee

By Homer Green

Copyright, 1930, by Perry Mason Company, Boston, Mass.

SYNOPSIS

There is a deep mystery about the trust under which John Imberlay, president of the Citizens' Bank of Briery, is acting as trustee. The creation and conditions of the trust and the beneficiaries are matters of which Mr. Imberlay alone appears to have any knowledge.

Mrs. Leighton, a widow, and her lame son, Robert, have just left Mr. Imberlay's office after an unsuccessful plea to have an extension of time on the long over-due mortgage on the farm. Mr. Imberlay has flatly refused their request but later seems interested in Robert and also in Rafe Orchard's neighboring farm and makes inquiries concerning both farms. Robert and his mother have tried without success to borrow money to save their home. A few days later they receive a letter from John Imberlay offering Robert a position in the bank and granting an extension of time on the mortgage.

A run-away gives Rafe Orchard a chance to play hero to John Imberlay's daughter and niece, who strike up a warm acquaintanceship with June Orchard. At the bank Robert is working on the mysterious trust fund. The Leightons and June are very much concerned over the serious illness of Rafe Orchard.

THERE was an item of payment noted on the cash-book for which he could find neither bill nor voucher, nor any explanation. He called the attention of Mr. Imberlay to the matter, and together they searched the files and records of the trust, but could find nothing relating to it. Mr. Imberlay went to his box in the vault, took from it a small package of papers, and returned with them to Robert's desk. He went over them carefully, one by one, but he could not find that for which he was searching.

He laid them down and leaned back in his chair to think.

"I have it!" he said, suddenly. "I recall it perfectly now. It was an item of expenditure of which the beneficiary had the benefit, but which was not quite in the line of my duty as trustee. I don't care to take credit for it. Strike it out. I had no bill nor voucher."

He seemed to be annoyed and embarrassed by the incident, and walking rapidly to a window, looked out into the street.

"There," he said, "is James with the team, waiting for me," and hastily putting on his hat and overcoat, he hurried away.

Ten minutes later, while rearranging the papers on his desk, Robert took up one that had not a familiar look to him, and opened it. He began to read it, but he had not read far before he became so absorbed in its contents that he forgot completely to lay it down. It did not even occur to him until he had read it through to the end that he was transgressing the bounds of propriety in doing so.

It was one of the papers that Mr. Imberlay had brought from his box and left on Robert's desk. It read as follows:

DECLARATION OF TRUST

Know all men by these presents: That I, John Imberlay, of the City of Briery, in Wyand County, State of Pennsylvania, do hereby declare, consider and acknowledge myself firmly bound unto Raphael Orchard of the same County and State to hold, invest, and manage for the said Raphael Orchard, and to pay over to him at such time or times, and in such amounts, as, in my judgment and discretion, seem to be wise, the sum of eight thousand four hundred and sixty-three dollars, together with interest thereon, and accumulated profits if any.

Under this trust I acknowledge myself to be a voluntary trustee, subject to all the laws of the Commonwealth of Pennsylvania relating to trusts; and I declare the sole beneficiary of this trust, and the sole owner of the above mentioned fund, subject to the terms and conditions of the trust, to be the above mentioned Raphael Orchard.

The genesis and purposes of this trust are purely equitable, and the terms thereof are reduced to writing in order that, in the event of the death of the trustee prior to the determination of the trust, the beneficiary thereof may not be prejudiced in his rights.

It is nevertheless, the intent and purpose of the trustee to turn over the said fund absolutely to the said beneficiary at the earliest possible day consistent with the convenience of the trustee and the welfare of the beneficiary, in which event this declaration of trust will be duly receipted or discharged.

In witness whereof I have hereunto set my hand and seal this twelfth day of May, A. D. 1863.
 John Imberlay. (L. S.)

ROBERT was dazed with astonishment. The information contained in the declaration of trust had come to him so suddenly and unexpectedly that he could not yet quite comprehend it. Mechanically he folded the paper and laid it back on the desk with the others brought by Mr. Imberlay from the vault.

At the same moment he heard hasty footsteps in the passage leading to the discount-room, in which he was working, and John Imberlay appeared in the doorway. The man cast an anxious glance at the papers on the desk, and appeared to be greatly relieved when he saw that they had been, apparently, undisturbed.

"I forgot to put these papers away," he said, gathering them up and stretching a heavy hand round them. "They are very valuable, and it is of extreme importance that no one but myself should see them."

He glanced at Robert as he spoke, but the boy was bewildered, and if his appearance indicated anything unusual, it was simply embarrassment at the intimation that he might have been guilty of obtaining clandestine knowledge.

There, of course, was the time for Robert to speak. At that moment he should have told John Imberlay that the privacy of his affairs had been thoughtlessly violated. After that, every hour that passed made an explanation more difficult. For his lips were sealed. He could not open them.

Even after Mr. Imberlay had placed the parcel

in his vault box and again left the bank did the boy's power of speech and all his senses return to him. He sat staring at the vault door like one in a trance.

What did it all mean, anyway? Why had this fund of eight thousand dollars been set aside to Rafe Orchard? In the twenty-two years that had elapsed since the date of the declaration of trust the original fund had doubled, trebled, until it stood now on the trust books at nearly four times its original value. And to think that it all belonged to Rafe Orchard, who during all these years had walked hand in hand with grim poverty, and to whom and to whose gentle daughter a fortune like this would bring relief, comfort, happiness unspeakable! Why were they not having the benefit of it? Why were they not enjoying it? If this money belonged to Rafe Orchard, as that paper declared, what right had John Imberlay to withhold it, especially in this hour of his dire need?

Robert rose from his chair, his hands clenched.

The Cheerful Plowman



EARLY TO BED

I USED to sit up till the guinea hen crowed, but all the next day I was lugging a load, for my legs wouldn't work with elastic and pep and the bob-up-and-down was all out of my step. My brain wouldn't function like brain ought to do and thoughts lost their way and they couldn't get through. My hand wasn't steady, my eye wasn't sure, and even my hearing it might have been true.

"Now hie you to bed," the same lady would say, "for you'll look like a rag at the break of the day; the plow must be steered on its course, don't you know, and how can a man with a drag in his toe escort that good plow back and forth in the field when his elbow is lax and his mind is congealed? Go, hie you to bed, for the paper can wait with its murders and dres in the nation and state; your bones must be rested, your brow must be eased, for the Fates can't be bullied, and worried, and teased. Go, hie you to bed and be-snore off to sleep, roll up in a restful and motionless heap!"

But I didn't listen, I read and I read till one fifty-eight eyes I staggered to bed. I read about markets, and battle-ships too, of stocks dropping down to the depths of the slough. I read of high-jackers in cities afraid, of robbers turned loose in a big armored car.

The next day, how useless and weary was I with pains in my head and red stings in my eye, with languor so heavy in all of my toes, with weight in my ears and with ache in my nose. Efficiency clipped of its wings and its fall! Had I never reformed I was listed to fall. But I have reformed and I'm ready to state the paper with all of its murders can wait. I'm off for my bed at a sensible hour and rise with my average quota of power. I rise with my brain cells and muscle cells all up and a-yelling for something to do.

his face flushed with indignation. It seemed to him that something should be done at once, and that whatever it was, he was the one to do it.

Then it occurred to him that he was letting his feelings run away with his judgment. What right had he to judge, anyway? Indeed, what knowledge had he on which a reasonable judgment could be founded? He knew simply that there was a fund, that John Imberlay was its trustee, and that apparently the beneficiary was not receiving the benefit of it.

At this moment Stewart, the receiving teller, passed the open door of the discount-room. Robert's appearance must have attracted his attention, for he stopped and inquired of him. "What's the matter? Anything gone wrong?"

"Nothing much," replied Robert. "I was bothered a little over this account, that's all."

"Oh! You looked so mightily flustered I didn't know but it was something serious. Let me tell you, Leighton, a bank clerk can't afford to act as if he was in trouble. Keep a clear head and a smiling face if you want to retain the confidence of the officers and the board."

Robert thanked him, and Stewart passed on. The boy considered the advice impertinent, but he did not at this moment care to resent it.

It had been Stewart's habit, since Robert came to the bank, to volunteer advice, most of which seemed to the young clerk superfluous, if not worse. Yet Stewart appeared to take a real interest in the boy and in his advancement. He gave him a good deal of information about the books, and enlightened him on many points of business connected with the bank. He instructed him concerning the duties of the receiving teller, in which duties Robert had now become so proficient that whenever Stewart was called from his post, or went to lunch, Robert took his place at the teller's window. The boy was quick and accurate in handling money, and careful in his scrutiny of checks and drafts.

YET notwithstanding all that, he had no liking for Stewart, and it annoyed him to know that the man had observed his excitement.

He took his seat again at the table, but he could not work. He could think only of the declaration of trust. Finally he closed his books, got his hat, overcoat and cane, and left the bank.

At the first street corner he met Margaret Imberlay. She looked very bright and happy.

"I've just had a letter from June," she said, "and she writes that her father is much better."

"That's very good news," "Yes," continued the girl, "June says the doctor is sure he'll get well now. I'm going to find papa and tell him. He's been so interested in Mr. Orchard."

"Has he?" "Indeed he has! He asks the doctor about him every day. And you should see the things he sends over there to make them comfortable."

When Robert went to Broad Valley the next Saturday he was able to confirm the good news of Rafe Orchard's convalescence. It was thought best, however, that he should not yet see the invalid, and he did not call upon him until the following week. Then he was surprised and shocked at the marked change in his appearance. Against the white background of the huge pillow the man's face looked very pale and gaunt, and Robert perceived that he was still extremely weak.

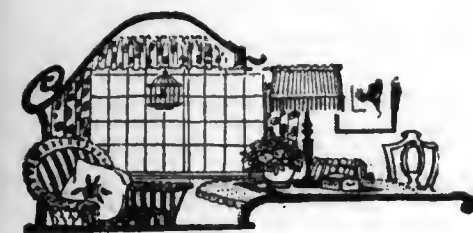
Robert did not say much at that time, but when he came the next week Rafe was able to talk; and two weeks later Robert found the convalescent dressed, sitting by a low wood fire, and playing with the strings of his guitar.

"I can't sing much yet," he explained, "but I get very impatient sitting here all day, and it soothes me to thrum these strings."

Robert's visit to his old friend would have been delightful had it not been that the specter of the trust seemed to stand constantly and forbiddingly between them. The man had little to tell about the severity of his illness, but he had much to say concerning the bright prospect of his complete recovery, and concerning his plans for the conduct of the farm.

"I've nothing to complain of," he said. "It's very comfortable in here. June does everything on earth for me. And your mother, Robert! What should we have done without her? For two months she has carried us on her hands and in her heart. And John Imberlay and his daughter! I don't understand it. I did a slight service for Margaret once, when the horses ran away, you remember, but surely that did not call for all the attention and liberality they have showered on me. Oh, well, I presume a man should not worry on account of having the many of too good friends."

(To be continued.)



Make Quick Gifts

By ESTELLE KESSELMAN

WE have just come across a real "find" for Christmas gift-making. It is a new thread—colorful and decorative. You thread it into your sewing machine, using the coarsest needle, then lengthen your stitch, and sew. Presto! Before you have stitched very far, you will realize that your sewing machine, which has until now turned out plain, sturdy seams, is capable too of producing charming, decorative effects.

This stitching can trim collar and cuff edges, apron edges, belts, seam lines, and can stitch applique or bias binding in place; it can be used for quilting, for hemming dish towels, for outlining motifs on hand and kitchen towels—for numerous finishes where even a simple decoration is desirable to give that touch of beauty and distinction that we crave in all our belongings.

The illustrations on this page are but a few examples of the many ways to use this new thread for machine smocking, so useful and artistic. The instructions for sewing are very simple. Put a No. 20 or 24 white thread in the bobbin and this new thread in the coarse needle. Adjust your machine to make seven stitches to the inch, and stitch just as you would a plain seam. Make as many rows of stitching as though you were doing hand smocking, and group the rows and colors attractively. Draw up the bobbin thread and shirr the fabric along on this thread until it occupies just the fullness that you want, whether it is for the front of a child's dress, a blouse, a skirt that joins a waist, or for the bottom of sleeves—any place where smocking or shirring is used.

Handwritten Initials

Pull the needle thread ends through to the wrong side, tie them and stitch over the ends if they come out at a seam. This will hold them securely. Once you have done smocking or shirring this way, you will be tempted to make innumerable lovely things with it because it is so practical and colorful. Remember, too, that the thread comes in boldest colors, so that it looks prettier after washing than before.

Did you know that there is quite a vogue for marking one's personal linen and towels with her own handwritten initials? Some of these initials are illustrated here. With free hand-writing on a piece of plain paper, write the initials that you desire to use, spacing or grouping them as you have seen monograms stamped. Initials for a bath towel, for example, should be three to four inches high; for guest towels, two to two and one-half inches. Write the initials in pencil, and if you want to mark a set of towels exactly the same, take half a dozen pieces of thin paper, pin them together, and run around the outlines of the initials with your sewing machine, using an unthreaded machine needle. The needle will penetrate through the thicknesses of paper and mark the initials. Then, pin or baste each piece of paper to the article exactly over the place where you want the initials to come, and with your special new thread in the desired color, sew on all the lines. You will find that you can stitch practically every letter in the alphabet without having to terminate the stitching before the end of the letter. For example, all the letters illustrated here, with the exception of the letter K, were stitched complete in one operation.

This new craft is fascinating. You will be amazed at its beauty and as soon as every Christmas gift is finished you will at once begin to make numerous other things for your own personal and household use.

This thread comes in spools of thirty yards for only five cents. It can be had in the most popular shades of all colors. Just think how far five cents

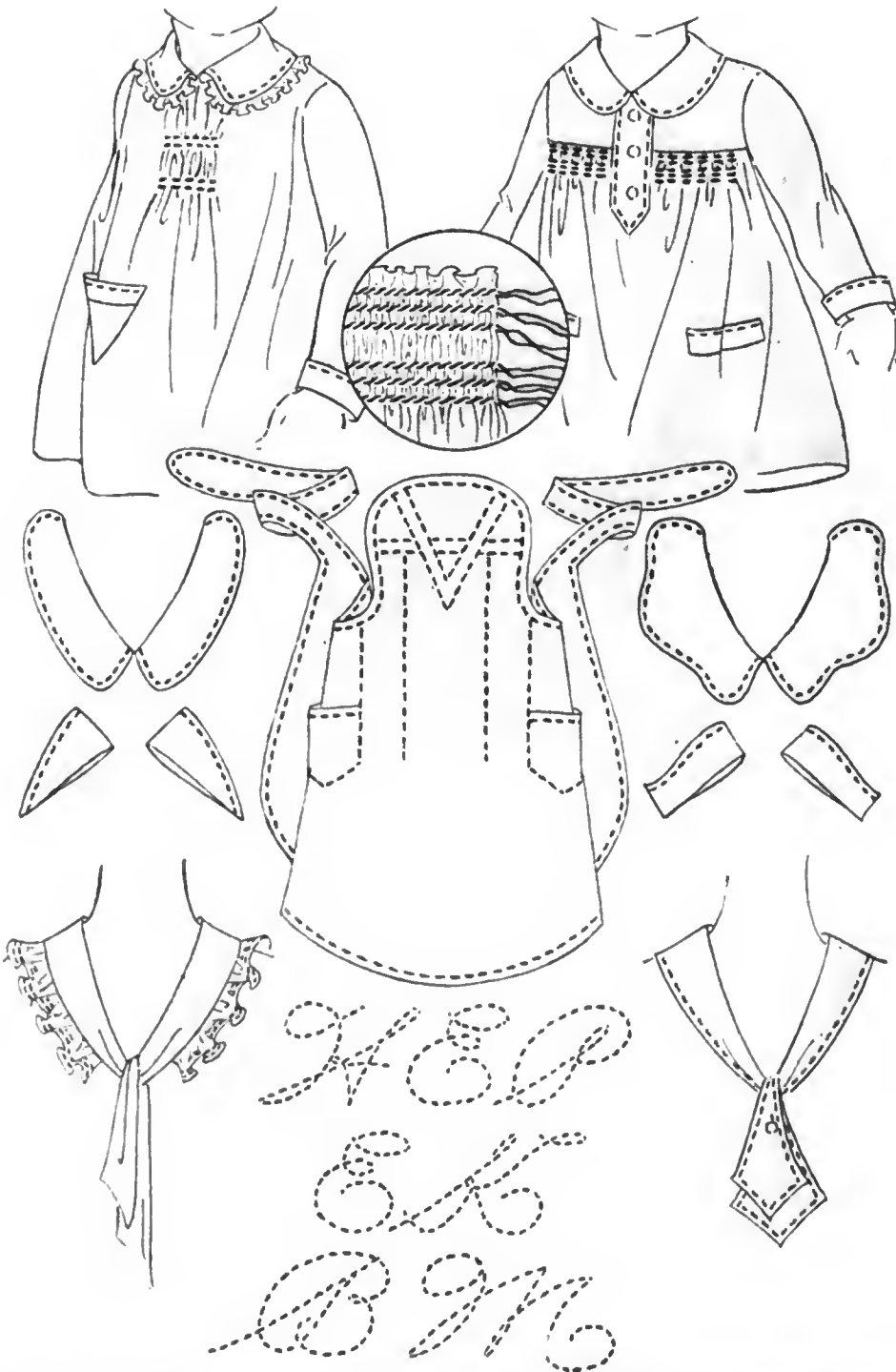
worth will sew in making your Christmas gifts individual and lovely.

Editor's note:—I have just finished two pillows using the two quilting patterns—Harp of Erin and Rising Sun (the two for fifteen cents) with this new thread. They are lovely, and were quickly done. I used thin padding and have a lovely effect of puffiness. These patterns are fifteen inches square and very adaptable. A sheet of further help and picture suggestions will be sent free on request. Address Home Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

Say It with Aprons

A FRIEND of mine is making a bit of pin money this season selling attractive aprons which she has made. The first thing I thought of when she showed them the other day was—"What lovely ideas for Christmas!"

They were all cut using the same pattern, but she had a fine variety simply through the use of different materials and colors. One was such a dainty affair—the white dimity material having a



These new stitches are decorative and easily made on your sewing machine

pretty lavender flower. This was trimmed with—yes, you guessed it—lavender bias binding.

A green and white checked gingham was decorated with green binding. Several in her collection were made with odd left-overs of cretonne. Pockets and trimmings of colors occurring in the cretonne added charm.

Unbleached muslin with pockets and yoke of cretonne and binding of black fashioned a striking apron with a real holiday atmosphere. Most of these aprons were the favorite slip-on puzzle type with crossed straps in the back. Often scraps of material about the house are plenty large to make the simple one-piece apron.

Mrs. J. P. Nawroot.

The Tested Cow

By R. G. BEACHLEY, M. D., DR. P. H. and NELL C. WESTCOTT

PERHAPS you wonder why the singular form of "cow" is used in this article on the prevention of tuberculosis in children.

If a farmer runs a dairy and sells his milk his state is most likely to step in and tell him he can only sell his milk if his cows are proved free from tuberculosis and if he handles his dairy products in conformity with the law. It is the one-cow farm where this preventive work is needed. You cannot sell infected milk to your city neighbors, Mr. Farmer, but you can serve it to your family.

Tuberculosis is caused by a germ called the tubercle bacillus. This germ is small, so small that it can ride into the body on minute particles of dust or on the tiny droplets of spray emitted during a cough. One thousand can pass through a pinhole. Sun is their natural enemy. After several hours of exposure to sunlight and fresh air these treacherous germs die. They can live, however, for some time in poorly lighted and poorly ventilated rooms. The human type of bacillus attacks man at all ages. Another variety, the bovine bacillus, attacks cattle and through them, infants and children.

Guard Their Health

On the farm the supply of milk is not likely to be pasteurized. Children prefer raw milk. The one-cow farm is likely to have great pitchers of milk and cream on the table. Children need milk. It is the perfect food. Pure milk stimulates growth, builds strong bodies, paints rosy cheeks and is generally liked by children.

No father would willingly store up for his children the long tedious years of battle for health, with perhaps a losing game, that comes with an active case of tuberculosis, yet that is the very thing some thoughtless fathers are doing on one-cow farms. Guard the health of your children by having that faithful cow tested. Protect the children further by the careful handling of milk. What is meant to be one of the greatest blessings of farm life can easily be turned into a serious menace. Give the children milk, plenty of it. But it must be pure.

Early Diagnosis

Children who have been exposed to tuberculosis by living in a home where there is a case of the disease or who have become infected by germladen milk may show no symptoms until they reached young adulthood. The most active period of the disease occurs between the ages of twenty to forty years. In order to guard more closely those who have been so exposed, many forward-looking physicians are advocating that children should have their lungs X-rayed while they are in high school or earlier.

Early diagnosis is three-quarters of the battle. The patient has a splendid chance of arresting the disease under proper care and conditions if taken early enough before the disease has made much progress.

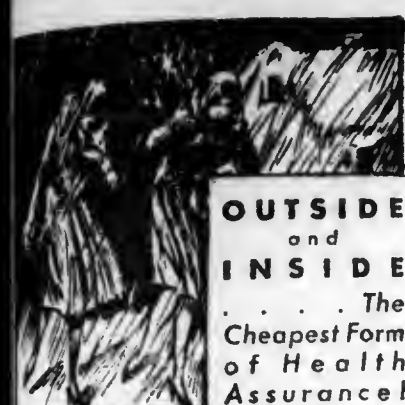
Don't let that pitcheful of delicious foaming milk hold anything but health-giving qualities for the youngsters. Have your cow tuberculosis tested.

EARLY SWEET PEAS

SWEET peas will bloom earlier if planted in the fall. Any time between the first of November and January is advised.

Dig a trench eighteen inches deep, put in a rich loam or leaf mold, then the sweet pea seeds two inches apart and over these a light covering of sand and well rotted manure. The trench should be within two inches of the surface level when finished. Fill in with small branches and leaves. In the early spring lift the covering of branches.

L. M. T.



BODYGARD UNDERWEAR

Protection plus. Comfortable because of faultless tailoring and the springy elasticity of perfect knitting. Absorbs perspiration and eliminates the cause of colds. Keeps you warm in any weather.

UTICA KNITTING CO. NEW YORK
AT YOUR DEALER'S

Springtex

A fine ribbed garment with springy texture.

ELASTIC UNDERWEAR

Black knit fabric with silky inner fleece.

Lambdown

Heavy fleece lined for men and boys only. Maximum warmth and comfort without excessive weight.

A style and weight for every climate, and every member of the family.

Ask to see the "Utica-Knit" Sleeper suits, for your children's protection.



SET OF DISHES FOR SELLING ONLY 30 Pkts. of Seeds GIVEN

ACQUAINTING all: If you prefer Colonial style 53-pc. set, handsomely decorated. Or 42-Pc. Airplane Set or other gifts according to plan in our catalog. Send for seeds today.



LADIES' FURS—See the latest and make them your own. Furs at reasonable prices. Send us your ideas and for which you want remodeled and made into latest styles. Bobs and coats at wholesale prices. Free Samples. Reference: Citizens State Bank, Milford, Ind.

Why Suffer with Skin Troubles when Cuticura Quickly Heals. Price 25c each. Sample free. Address: "Cuticura," Dept. 28, Malden, Mass.

85¢ WALL PAPER. To Paper a 10x12 Room Complete. Send for FREE Catalog. L. F. DUDLEY, 52 N. 2nd St., Phila., Pa.

Holiday Sweets

OFTEN the amateur is bewildered and afraid of the complex recipes given for the sweet things one likes to have on hand during Yuletide. These very simple delicacies are easy to make and never fail.

Cannot-fail Fudge—For the chocolate lover, I know of no better fudge. It requires one pound of white sugar, one whole egg, one teaspoon vanilla, two teaspoons hot milk, or canned milk, one-fourth pound bitter chocolate and two tablespoons butter. Melt the chocolate and butter together in a sauce pan. Beat the egg in a bowl and add to it all the remaining ingredients. As soon as the first mixture is melted, combine with the egg mixture, beating constantly. Pour into a buttered pan to cool. This is good "as is," but a cup of nuts, either English or black walnuts add to its goodness.

Best-ever Fruit Dessert—Two cups graham cracker crumbs, three-fourths cup of chopped marshmallows (pressed down), three-fourths cup chopped dates and several tablespoons cream. Blend the fine crumbs with the marshmallows and dates, then add just enough cream to be enabled to mould the mixture into a nice loaf. This is surprisingly delicious and should ripen several days before serving. When ready to serve, cut in slices, topping each plate with a rosy red cherry or perhaps a dash of whipped cream.

Candied Orange Peel—Carefully save the pretty golden rinds from breakfast oranges. Trim out all fibre, and cut the rind into neat strips. Cook in cold water to cover for twenty minutes. Drain and repeat this process two times. Then after the third draining, add one cup sugar for each cup orange. Cook very slowly until the mixture sugars and is nearly dry. Then remove from fire and roll in granulated sugar. Spread out to dry. G. S. S.

Organdie Pillows

These cleverly designed pillows are pleasing and attractive and lend special beauty to a cozy nook or the boudoir.

No. 84 is stamped on maize colored organdie and embroidery is accomplished with six-strand cotton with lazy-daisy stitches, French knots, satin stitches, basting and outline work, including a three-inch strip for boxing and sufficient material for the back. Price of this pillow is fifty cents.

Portions of designs No. 2721 and No. 2724 are tinted with washfast oil colors. No. 2721 is of maize colored organdie. Eyes are tinted with blue, lips in red, hair is Auburn, red for roses and green for earring and leaves. Outline face in black, brown basting stitches for hair and red, yellow and pink for roses.

No. 2724 is of green colored organdie



with red, yellow and black tinting. Outline stitch in black for face, shoulder, hands and hair; orange French knots in center of comb; hot band, cuffs and collar are in red. Price for each of these numbers is fifty cents, and includes sufficient material for boxing and back.

No. 2725, parrot design, is stamped on maize colored organdie. Embroidery is made with wool yarn in outline stitch. Red, blue, green and yellow for feathers, grey for bill and feet, brown for stem and three shades of green for leaves. Price of this pillow is thirty-five cents, including sufficient material for back and for boxing. Embroidery floss can be furnished for 50c extra for any design.

Order by number. Address: Embroidery Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

Make it! Taste it! Compare!



See what a difference Calumet's Double-Action makes

Want proof? Want to know why Calumet is the most popular baking powder in the world? . . . the favorite baking powder of millions of women?

Just make a Calumet cake—you'll see! You'll see the difference Calumet's Double-Action makes. New delicacy of texture! Extra tenderness! Superb flavor!

Calumet brings this extraordinary success to baking because it acts twice—not just once! The first action, which begins in the mixing bowl, starts the leavening. Then, in the oven, a second action begins. It continues the leavening. Up! . . . up! . . . it keeps raising the batter and holds it high and light. Cakes, muffins, quick breads bake beautifully, even though you may not be able to regulate your oven temperature with utmost accuracy.

All baking powders are required by law to be made of pure, wholesome ingredients. But not all are alike in their action nor in the amount that should be used. And not all will give equally fine results in baking. Calumet is scientifically made of exactly the right ingredients, in exactly the right proportions to produce perfect leavening action—Double-Action!

Try Calumet. Try it confidently—even if you're a beginner you'll have marvelous luck. Remember to use only one level teaspoon of Calumet to each cup of sifted flour. This is the usual Calumet proportion and should be followed for best results—a splendid economy which the perfect efficiency of Calumet's leavening action makes possible. . . . Get the wonderful new Calumet Baking Book. Mail coupon NOW.

CALUMET

The Double-Acting Baking Powder

A Product of General Foods Corporation

MARION JANE PARKER
c/o Calumet Baking Powder Company, Inc.,
4100 Fillmore Street, Chicago, Ill.

Please send me, free, a copy of the new Calumet Baking Book.

Name _____
Street _____
City _____ State _____
Fill in completely—print name and address.

FREE NEW CALUMET BAKING BOOK





Good Luck is treacherous!

Bad Luck is expensive!



"balance"

is better than *any* kind of luck!

Millions of women have learned that "balance" is the one thing that eliminates luck from baking. "Balance" in a recipe means every ingredient in just the right amount. "Balance" in flour means an exclusive Pillsbury blend of the finest wheats, which produces a flour containing just the right quantities of protein, moisture and mineral, just the right color and absorption qualities, to work perfectly for all your baking. There is no other flour like Pillsbury's Best, perfectly "balanced" for unfailing success in everything you bake. It's worth asking for!



Pillsbury's Best Flour

"Balanced" for Perfect Baking

TWO HELPERS INSTEAD OF ONE IN EVERY BAR
That's why

FELS-NAPTHA IS THE WISEST KIND OF WASHDAY THRIFT

ON WASHDAY, the bargain most worth seeking is the one that saves you. And that leads you straight to Fels-Naptha.

For Fels-Naptha brings you not simply more "bars" for your money—but more help. The extra help of two active cleaners brought together in one golden bar. Soap, yes—unusually good golden soap, the dirt-remover. And in addition, naptha—the grease-dissolver.

Together, this busy team loosens even stubborn dirt and washes it away. Together, they do the hard rubbing for you. And they get your clothes so sweetly fresh, so thoroughly clean and white, that you'll be delighted.

Fels-Naptha saves your hands, too. That's because it works so quickly you don't have them in water long. Try it and see! Use Fels-Naptha in tub or

machine. For soaking or boiling. In hot, lukewarm or even cold water. Look for the big, generous bars at your grocer's. For convenience sake, get the 10-bar carton and have extra help handy for all your washing and household cleaning.

SPECIAL OFFER—We'll be glad to send every user of laundry soap a Fels-Naptha Chipper. Many women who chip Fels-Naptha into their washing machines, tubs or basins find this chipper handier than a knife. Use it and Fels-Naptha to make fresh, golden soap chips (that contain plenty of naptha) just as you need them. Send only a two-cent stamp to help cover postage, and we'll mail you this chipper without further cost. Write to-day. Dept. 7-12-6 Fels & Company, Philadelphia, Pa.

THE GOLDEN BAR WITH THE CLEAN NAPTHA ODOR

FELS-NAPTHA



Let's Be Well Dressed

No. 4828.—Child's apron. Cut in five sizes: 2, 4, 6, 8 and 10 years. A 6-year size requires 1½ yards of 27-inch material. Price 15c or two for 25c.

No. 7021.—Ladies' dress. Designed in sizes: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 5½ yards of 39-inch material. The sash of ribbon requires 2½ yards. Price 15c or two for 25c.

No. 7021.—Ladies' dress with slender hips. Designed in sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 46-inch size requires 4½ yards of 39-inch material. For contrasting material ½ yard of 39-inch material is required. The width of the dress at the lower edge with fullness extended is 3¼ yards. Price 15c or two for 25c.

No. 7039.—Girls' dress. Designed in sizes: 6, 8, 10 and 12 years. A 10-year size without sleeves requires 2½ yards of material 39 inches wide. With sleeves 3 yards. Price 15c or two for 25c.

No. 6815.—Girls' undergarment. Cut in four sizes: 2, 4, 6 and 8 years. A 6-year size requires 1 yard of material 35 inches wide. Price 15c or two for 25c.

No. 6815.—Ladies' slip. Cut in four sizes: small, 31-36; medium, 38-40; large, 41-43; extra large, 46-48 inches bust measure. A medium size requires 2½ yards of 39-inch material. For shoulder straps 4 ribbon 1 yard is required. The width of the lower edge with platts extended is 2½ yards. Price 15c or two for 25c.

No. 7035.—Girls' dress. Designed in sizes: 6, 8, 10, 12 and 14 years. A 12-year size without sleeves requires 2½ yards of material 39 inches wide. With sleeves 3 yards. Price 15c or two for 25c.

No. 6808.—Ladies' undergarment. Cut in four sizes: small, 31-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2½ yards of 39-inch material. Price 15c or two for 25c.

No. 6808.—Girls' dress. Cut in four sizes: 4, 6, 8 and 10 years. A 6-year size requires 2½ yards of material 35 inches wide. For contrasting material ½ yard 35 inches wide, cut crosswise is required. Price 15c or two for 25c.

No. 7046.—Ladies' blouse. Designed in sizes: 31, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 2½ yards of 39-inch material. For contrasting material ½ yard is required cut crosswise. Price 15c or two for 25c.

No. 6293.—Girls' top garment. Cut in five sizes: 6, 8, 10, 12 and 14 years. A 12-year size requires 2 yards of material 36 inches wide together with ½ yard of contrasting material. Price 15c or two for 25c.

No. 7048.—Two sets of dress. Designed in sizes: small, medium and large. It requires ½ yard of 39-inch material for No. 1—with double collar and with vestee—and 1 yard for No. 2 if made with jabot portions. For medium size. Price 15c or two for 25c.

No. 7035.—Girls' coat. Designed in sizes: 2, 4, 6, 8 and 10 years. A 10-year size requires 2½ yards of 39-inch material. Without cape 2½ yards of 39-inch material. Price 15c or two for 25c.

HOW TO ORDER

All patterns 15c each, two for 25c. Be sure to give number and size. Address: Pattern Department, Pennsylvania Farmer, 711 Penn. Ave., Pittsburgh, Pa.

Say
no more—
I'm sold!

THAT'S what I told the chap who introduced me to pipe-joy, with a first load of P.A. I knew I was slipping the instant I opened the tidied tin and got a full whiff of that tantalizing Prince Albert aroma. "If the taste is half as good as *that*," I said . . .

Half as good? It was cool as the wife's reminder of an anniversary—sweet as her smile when you prove you've remembered the date. Refreshing? Yes, sir! Mild and mellow

and long-burning, that's what it was. Was I sold? Ask me another!

As far as I'm concerned, Prince Albert is the world's greatest tobacco for pipes or roll-your-own. There must be millions of others who feel the same way about it, because P.A. is sure a world-beater, any way you figure it. On the word of a friend, get some P.A. this very day. Load-up and light-up . . . and learn the truth direct!

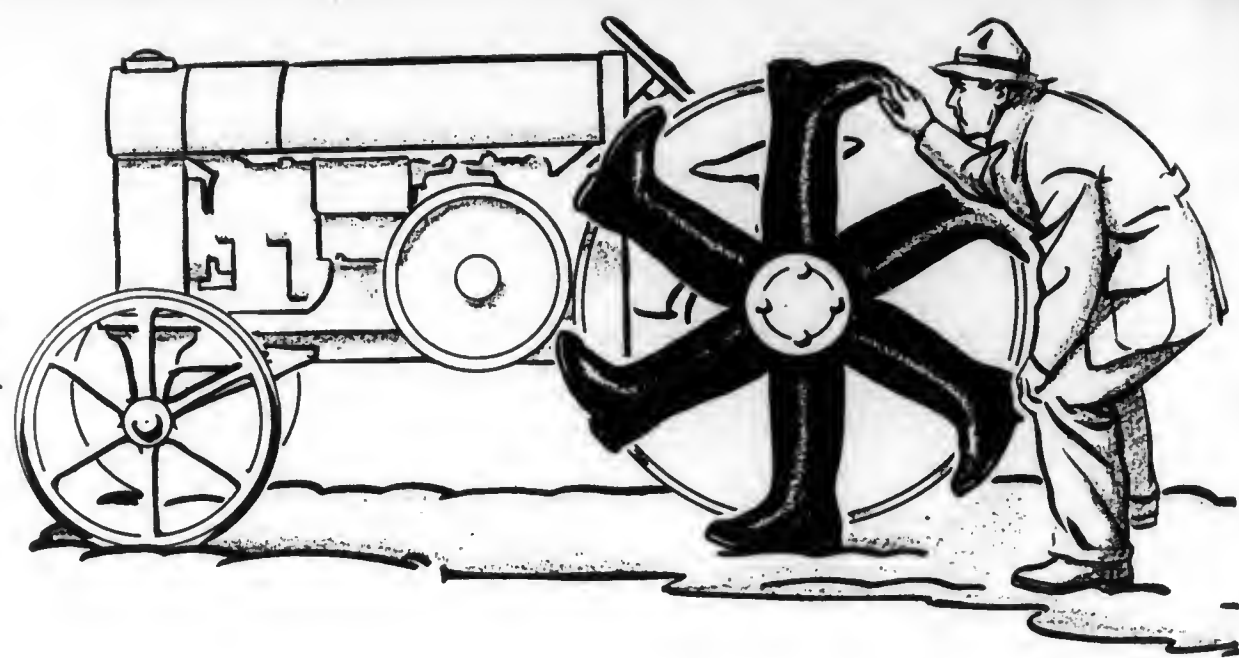


Here you are—TWO full ounces of downright pipe-joy.

PRINCE ALBERT
—the national joy-smoke!

© 1930, R. J. Reynolds Tobacco Company, Winston-Salem, N. C.

"No work today... the tractor has bunions!"



If your tractor wore boots, you would buy it the very best boots you could find. Just think what it would cost you in time wasted and repair charges if that tractor broke down right in the middle of the spring plowing.

But your feet are a lot more important pieces of farm machinery than your tractor. If your *feet* break down, *everything* stops. It's even painful to get out and feed the hogs, let alone doing a full day's work. And there isn't any service station that can do a quick repair job on a pair of broken-down feet.

So it's mighty important that you protect your feet—and nothing protects your feet against breakdowns like a fine

pair of boots. Good-fitting, comfortable boots help to prevent corns and bunions, chilblains and blisters, and many ordinary foot troubles.

Rubber footwear for the entire family. For work, dress and play.



"U.S." Blue Ribbon Boots—The minute you slip on a pair you recognize the superior qualities—fit and comfort. Red uppers with white soles or Ebony black with white soles. Three lengths—knee, medium, hip.

"U.S." Blue Ribbon Watrous—(All-weather arctic.) Try this one for that early morning cold weather work. You'll like it. Slips right over your leather shoe. Kicks off in a jiffy. Built to stand the hardest usage. Four, five or six buckles.

Style for the modern farm wife—Do you know that Paris style authorities have declared Gaytees the most stylish women's overshoes in the world? You'll be especially attracted by the many different colors and fabrics of Gaytees—there's one that will just match your coat.

Gaytees come in cloth or all rubber—in high or low uppers. Snap fastener. Kwik-glide fastener, or 4 buckles. Look for the name "Gaytees" in the shoe.

For Son and Daughter—Keds are the most popular canvas rubber-soled shoes in America. They give barefoot freedom—encouraging the feet to healthy growth—yet afford the protection you want. They are not "sneakers." They are the chosen shoe of star athletes because they are so comfortable and healthful for the feet. Recommended by physicians and gymnasts.

We know that. So, when we make a pair of "U.S." Blue Ribbon Boots, we start with the design of your feet. We mould these boots on special aluminum lasts that duplicate the shape of your right foot and your left foot. We build each boot, inch by inch and piece by piece, so that it will fit around your toes and instep and ankle like a glove. We leave plenty of room for free movement, but not enough to cause chafing. We put extra thickness at the wear-points, but we're careful about too much weight—we don't want your Blue Ribbon Boots to weigh you down. **The boot that's comfortable is the boot that fits!**



A FREE book you ought to have

We'd like you to have a copy of this valuable book, "The Care of Farmers' Feet." It was written by Dr. Lelyveld, nationally known foot specialist. We believe you'll find it mighty handy to have around the house because it tells all about corns, bunions, itching feet, chilblains, etc. And suggests good common-sense remedies. Check the coupon below.

United States Rubber Company
Dept. FFF-120, 1790 Broadway, New York
Gentlemen: Please mail me your free book.
"The Care of Farmers' Feet."

NAME _____
ADDRESS _____
TOWN _____ STATE _____

**"U.S."
BLUE RIBBON**



**foot-saving
footwear**

this Christmas own the radio praised by MARCONI



Senator Guglielmo Marconi, the great scientist who invented radio, acclaims the new Radiola Super-Heterodyne as "a great advance in Radio."

In performance and price the new Radiolas are especially suited to the farm!

WHAT a useful, practical gift... not only affording glorious hours of home entertainment, but also home education for the young, helpful household hints for mother, weather forecasts, crop news, market reports and other business services for father! It's more than a musical instrument—it's a farm necessity!

What an amazing instrument—this new RCA Radiola Super-Heterodyne! So highly developed that Marconi himself, the inventor of radio, acclaims it "a great advance in radio reception."

So pure in tone, so alert in performance that it is indeed worthy to carry the greatest stamp of approval in radio—the RCA trademark, the symbol of the world's foremost radio organization. The new Radiola, with its remarkable power and performance, is an ideal instrument for rural homes located at great distances from broadcasting stations. It brings in even far-away stations, strong and clear, with life-like tone.

New Features—Low Prices!

What fascinating new features... models with the very latest electric phonograph... so you can have the pleasure of directing your own musical programs... home recording... so you can have the amusement of making "talkie" records of your own voice, or of radio programs you would like to hear again... remote control... so you can change stations from your easy chair... tone color control... so you can adjust tone quality to suit your own taste.

Only four Christmases ago, a Radiola Super-Heterodyne console cost \$570. Now, with all the great developments of the last four years, the model 80 illustrated comes to you for \$142.50, less Radiotrons.

Whether You Have Electric Service—or Not!

No matter where you live, RCA Radiola has an instrument to suit your needs. Four different models operate from light sockets. For battery operation we recommend the Radiola Model 22, a highly perfected Tuned Radio Frequency circuit.

Go to your nearest Radiola dealer. He's a dependable merchant selling the world's most dependable musical instrument—the Radiola. Hear the various Radiola models—and look for the RCA trademark on the dial. Insist on this guarantee of future satisfaction!



New RCA Radiola Super-Heterodyne Model 80—Screen grid—9 tuned circuits—magnified, illuminated tuning dial—improved volume control—local-distance switch—push-pull power amplifier—improved electrodynamic speaker—handsome walnut cabinet—\$142.50, less Radiotrons. Also de luxe model and Radiola with electric phonograph.



RCA Radiola Model 22—(Tuned Radio Frequency) operated by batteries—at a price all can afford! Screen grid receiver for battery operation. With enclosed RCA loudspeaker. A wonderful value for the money. An excellent set for receiving your favorite station with amazing clearness and lifelike reproduction of tone. Beautiful cabinet.



RCA

**Radiola
SUPER-HETERODYNE**

Right now is the time to do some figuring for next spring

We don't know just what kind of records you've been keeping this year or how you figure your costs but we urge you to make them as complete as possible. It's the only way to make sure you are eliminating all waste and making the greatest possible profits.

Here is a good example of how it helps to keep careful records. We know a couple of farmers in Ohio who live right across the road from each other. They both work about the same acreage and raise the same crops.

One of them is very progressive. He makes use of every modern method possible, and keeps accurate figures on everything he does. He knows what it costs to feed his cattle and what the return is when he sells them. In the fall, after corn-picking time, he knows exactly what every bushel costs—including seed, labor, tractor, fuel and oil, repairs, etc.

With such records in front of him he has been able every year to lower costs at some point or another. And the result is greater profit. It is evident too. He has a beautiful home and a new car—everything about his place looks prosperous.

But the farmer on the other side of the road was very much different, in spite of the fact that his land was just as good and he had just as much of it. He looked far from prosperous. We asked him how much it cost him to put in his corn. He looked puzzled for a moment. He had no records and finally made a couple of wild guesses that varied considerably. Well, it was no wonder he wasn't making money.

Naturally, we were interested in the lubricants these two farmers used in their tractors. Our more successful friend was using the highest quality oil he could buy. His cost records showed him that he saved money that way. You've probably guessed what his neighbor does. Yes, he buys low-priced, inferior oils. Since he keeps no records, it's only natural he should figure that he was saving money by purchasing oil at low prices. And yet he wondered why his tractor was such a wreck and had hardly enough power to pull a drag, let alone make a plow bite in. He was losing money on the operation of his tractor.

Why farmers use Mobiloil

In this little story you have the exact



Do a thorough job of storing your tractor for the winter. It will add extra years of life.

reason why so many modern farmers use Mobiloil. They know, for instance, that Mobiloil holds its rich lubricating character right up to and beyond the 60-hour draining period. And during those 60 hours, Mobiloil does a complete lubricating job.

Mobiloil protects bearings, pistons and piston walls from wear. It does not cause excessive carbon deposits. It's no wonder farmers save money with Mobiloil when it accomplishes so much toward eliminating repair and overhauling costs.

Besides, Mobiloil helps the tractor develop more power, saves fuel and keeps it working like new over a longer period of years.

How Mobiloil gives these results

In Mobiloil, ALL the essential properties of a full duty oil are present and in correct proportion for your tractor engine.

These properties are: (1) **OILY CHARACTER**—provides moving parts with rich lubrication—and holds down wear; (2) **RESISTS HEAT**—lasts longer—keeps down oil consumption, and makes for economical use; (3) **CONTROLS CARBON**—keeps hard carbon deposits from piling up in your cylinders; (4) **OXIDATION CONTROL**—keeps oil systems from clogging, and valves from sticking and gumming.

How about the transmission?

Here's some information that may prove valuable for you to remember when it comes time to start the spring work.

This summer, some of our men traveled around over the southwest calling on farmers. They just stopped here, there and everywhere, looking into the transmissions of tractors. They found quite a few that were not in any too good condition because the farmer had been running the machine for two seasons, without cleaning out the transmission and putting in fresh oil.

It is really mighty important that you renew the oil in the transmission every season—twice a season if you use the machine a great deal.

For transmissions use Mobiloil "C" or Mobilgrease in the summer, and Mobiloil "CW" in the winter. They will protect the gears from wear and add extra years of life to the machine. Consult the Mobiloil Chart for the correct grade.

Pressure fittings and grease cups

Applying the grease gun and turning down grease cups every day, during the busy season, is just another part of the good lubrication a tractor needs.

We've developed a grease for pressure



Make this Chart your guide

The correct grade of Mobiloil for your tractor engine and transmission is specified below. It may be found here, or the complete chart is now available from 32 E. Broad Street, New York 1, N. Y. Write for your copy.

Follow winter season oiling schedule.

For more information, write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

Write for your copy.

December 6, 1930

Farm Problems

Cooked Feeds for Hogs

I have a nice bunch of shotes, but do not have enough corn to put them in shape for market. I have some corn, wheat, oats, rye, buckwheat, also some sugar beets and turnips. If I should mix a big kettle about an hour, could I expect as much gain from the shotes in weight as if I had the grain chopped? The costs of boiling and chopping are about equal.

Does boiling increase or decrease the food value of grain? I have been feeding boiled grain, mixed about equal parts to poultry with, I think, good results.

G. B. W.

EXPERIMENTS show that in most cases there is a loss in cooking feed for swine. Some feeds, such as potatoes and field beans, are improved by cooking.

Grinding the grains you have available is the best means of preparation and will give best results. With the prevailing price of wheat your ration may be materially cheapened by using maximum amount of this grain.

Pigs should have only small amounts of sugar beets and turnips.

F. L. Bentley.

Quince Bush Blight

Could you give me a formula for spraying for quince bush blight? Mine are dying a limb at a time. The bushes are young and very thrifty other than the limbs dying. Mrs. Owen J. Ritchey, Bedford county, Pa.

APPARENTLY this is "fire blight," a bacterial disease which attacks apple and quince, but is most serious on the quince. No spray will control it. The only recourse known is prevention. Keep the quince bush growing very slowly; blight is most likely to occur on vigorous, sappy branches. A slow growth is induced by keeping the bushes in sod and by withholding manure or nitrogenous fertilizer.

Blighted limbs should not be cut out during the growing season; this is likely to spread the disease, rather than to check it. Cut out all blighted limbs in the winter, especially blighted limbs, the rough sunken diseased areas at the base of the blighted limbs. These "holldover cankers" carry the disease over the winter. In commercial practice, the tools are disinfected after each operation.

There are many reputed cures for fire blight but none is consistently effective. The permanent corrective is to breed disease-resistant varieties. This is now being done by the Experiment Stations, with the apple and the pear.

S. W. Fletcher.

Wants to Drive Pipe

A READER asks about the practicability of driving a two-inch pipe down 500 feet, using a 1,000-foot pile driver to do the driving. This is not practicable at all, as he would smash the point and double up the pipe if he struck rock beds of any kind, a small niggerhead, or even a layer of slate or very tough clay. In fact, I doubt if he could drive a two-inch pipe 100 feet through sand and gravel without breaking the point bending the pipe.

Even if he could drive a two-inch pipe down 500 feet, he would probably not be able, because of bends, to get a cylinder down in it to pump the water, so it would do no good. I know of no way except to drill or to bore the well and put in the casing.

I. W. Dickerson.

An Oats Sprouter

LOYD HOFFER asks for an oats sprouter. The man who hatches our baby chicks yearly told us to soak a bushel of oats, or as many more or less as we want, in warm water, then pour them in a fertilizer sack. We do that and leave them on the cellar floor in sack about two days, when they sprout and for the hens. We think they eat a lot easier than the trays.

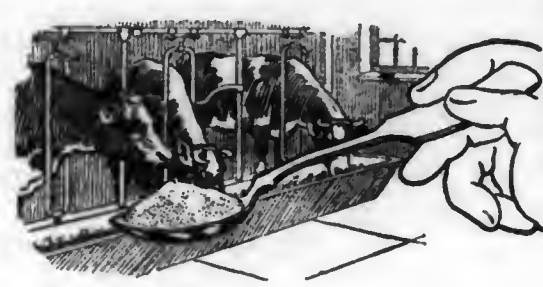
Emory Wolf.

PENNSYLVANIA FARMER

(519) 17

Dry-fed Cows to maintain Profitable, Productive Vigor ... NEED Conditioning

... SAYS
Dr. Clark



DAIRY economists say that in an average dairy a production of only 10% more milk will actually double the net return.

Why Kow-Kare is Needed

Consider the sudden extreme shift in the milk-making load of the winter months. Cows are housed in... with little exercise, fresh air or sunlight. Succulent, green pasturage is supplanted with volumes of dry, concentrated feeds and roughage. All are hard to digest and convert into milk without expensive waste. The producing organs are weakened, the yield falls off... costly ailments result.

Kow-Kare, as a part of the winter diet, aids and supports the milk-making function by giving strengthening aid where help is most needed. This scientific blend of Iron, the great blood tonic, combined with potent drugs, roots, herbs and pharmaceutical minerals... regulates and invigorates the digestion, as-



WITH MINERALS

Through a long period of years in veterinary practice, for a large part devoted to the dairy industry, I have had an opportunity to observe the effects of dry-feeding diet on dairy cows. Here in California many herds are kept on small tracts close to cities for economical shipment or distribution of milk. There is no space for pasturage or the growing of soiling crops, and these cows must be dry-lot fed. This method of dry-feeding in California is a similar principle to the dry barn-feeding in Missouri, where for years I also practiced among the dairies.

My experience under these widely different types of dry feeding convinces me that mineralized condition powders have a real value and are a good investment for the cow owner. Dry feeding detracts from the maintenance of a big appetite, and is generally deficient in minerals. Sluggishness in throwing off waste material usually adds to the troubles.

Regular conditioning with a medicinal-mineral preparation in the available feed can correct these factors and if the herd is kept free from the scourge of contagious diseases, the cow owner can promote a high standard of normal milk yield, with regular breeding and the natural birth of strong, vigorous calves.

The more unnatural the conditions under which cows are kept, the more need there is to supplement the feed with an effective mineralized conditioner.

L. G. Clark
D. V. S.



L. G. CLARK, D. V. S.

A veterinarian with about twenty years of active practice in the dairy country of Missouri, and one of the most extensive cattle practices in Southern California.

simulation and elimination. By aiding these key functions, more of the milk-units in the feed are realized... the ravages of disease and ailments common to cows are less of a problem.

Kow-Kare is the winter aid to normal milk yield that is used increasingly each year by cow owners who have demonstrated for themselves the money-earning value of this great concentrated medicinal formula.

Condition for Calving

The use of Kow-Kare before, during and after calving is now widespread in the better dairies. The added burden of growing a healthy offspring and resisting dreaded disorders calls for just the type of constitutional aid provided by this remedy that has met with growing favor for over thirty years.

Ask your feed, drug, hardware or general store for Kow-Kare. Two sizes, \$1.25 and 65¢. Mailed postpaid if your dealer is not supplied. Use the coupon to send for our authoritative treatise on the care of dairy cows. You will find it worth keeping for regular reference.

Dairy Association Co. Inc.
Dept. 25, Lyndonville, Vermont

KOW-KARE

The concentrated...
open-formula conditioner

Send for FREE Cow Book

Dairy Association Co.
Dept. 25, Lyndonville, Vt.
Please send me your 36-page illustrated book on cow ailments for my guidance in treating diseases and disorders.

Name _____
Address _____

Warning—Do not make the mistake of choosing a conditioner or "tonic" for bulk or low price. This concentrated product of established reputation will provide greater medicinal action at lower cost and save time and disappointment

ACHES and PAINS Quick Relief with JAPANESE OIL

"Don't Let Pain Keep You At Home." Anytime Japanese Oil is used, by millions of busy people instead of hot water bags, electric devices, groovy salves, sticky plasters for Rheumatism, Neuralgia, Neuritis, Sore Muscles, Sprains, Stiff Joints—Pains caused by fatigue and exposure. Rub it in. It gives a pleasant soothing heat that drives out pain QUICK. Won't blister like old type liniments.

HEAD COLDS CHEST COLDS

Japanese Oil often relieves them in 24 to 48 hours. For head colds inhale antiseptic vapors. For chest colds, congestion, sore throat rub in vigorously. At Your Success Behind R1 A: Druggists

GIVEN A WRIST WATCH

Guaranteed time-keeper. Latest totemus style. Jeweled movement. 3 beautiful colored ribbons. Sell 30 parts. Vegetable & Flower seeds. 10¢ per plan in our catalog. We trust you. Send now with Big EXTRA PRIZES AMERICAN SEED CO. Dept. C-692 Lancaster, Pa.

YOU CAN EARN BOTH

Handy Airtight or Highgrade WATCH given for selling 8 boxes AMERICAN SEED CO. 32¢ each. Remits the \$2.00 and sales price. Order boxes and FREE OIL Catalog. SEND NO MONEY. WE PAY YOU UNTIL SOLD. Railroad Postage Co. Box 51, Woodboro, Md.

ADVERTISEMENTS

are short-cuts to finding out truths. The truths about everything you want to buy. The names in advertisements are names of solid reputation. The labels in advertisements are symbols of satisfaction. It pays to read the advertisements, for then you know what is good. The products they tell about are being bought, tested constantly. The fact that they're still being advertised is alone proof of their worth.

When writing advertisers please mention Pennsylvania Farmer

Mobiloil



VACUUM OIL COMPANY
Makers of high-quality lubricants for all types of machinery

THE YOUNG PEOPLE

Biscuits by Four-H Club Girls

THE various food preparation and meal planning projects that are carried on among Four-H Club girls usually include a unit on making breads of all kinds—both yeast-raised breads and quick breads, such as biscuits, muffins and griddle cakes.

The picture shows Hazel Connor, a New Hampshire Four-H Club girl starting to make some biscuits. Hazel has done the cooking for the entire family for the past three or four years, for her mother is an invalid. She has found the knowledge gained in club work of considerable help to her.

The standard recipe for biscuits which many Four-H girls use is in Farmers' Bulletin 1490-F, Home Baking, which is free to any one writing to the U. S. Department of Agriculture, but in case some reader wants to use it at once, it is given here.

Baking Powder Biscuits

One cup milk, three cups sifted soft wheat flour, four or five tablespoons fat, four teaspoons baking powder and teaspoon salt.

Either milk or water may be used as the liquid in baking powder biscuits and the quantity varied to obtain the kind of biscuits desired. Some persons prefer the texture of a biscuit made from very stiff dough, using a little liquid as possible. Others like a lighter biscuit, for which the dough is made very soft by using more liquid and combining very lightly. Drop biscuits which are not rolled out may be made by adding still more liquid than for a soft dough.

All dry ingredients are mixed and sifted together. The fat is worked in, and the liquid is added to this fat and flour mixture. Cutting the fat into the flour with knives, a pastry fork or a biscuit cutter is often recommended to avoid warming or handling it too much, but the tips of the fingers may be used if the work is done quickly.

Sour milk may be substituted for sweet if a scant half teaspoon of soda is used to neutralize one cup of sour milk. Two teaspoons of baking powder are then omitted, but the other two teaspoons of baking powder are used.

Peanut butter may be used for part of the fat in making biscuits. In the above recipe use four tablespoons of peanut butter and two tablespoons of fat. The biscuits will have a fine nutty flavor, and will be appreciated for lunch or tea. Or use half a cup of ground nuts instead of the peanut butter.

Homemade Ice Cream

WITH a little molasses pail with a tight cover, or a coffee can, or even a little milk can with a push top you can have great fun making a small amount of ice cream in winter when the ice is plentiful. If you set an old pail out filled with water you will have a big chunk of ice after a cold night.

Now get your mother to save out a cup of hot, soft, corn starch pudding when she makes it for the family, and flavor it with lemon, vanilla, chocolate or orange. While it is hot beat into it a cup of sugar and a cup of cream. It will swell up and look much larger than when you commenced. Now put it into your little freezer and set the tin pail in a deep granite pan. Break up your ice and put it around the pail with plenty of coarse salt. Turn the pail round and round so the cream does not freeze to the sides and leave the middle soft. Once in a while open the pail and stir the cream well with a stout spoon.

You can have a nice little party making the ice cream. Some children invite in their little friends and



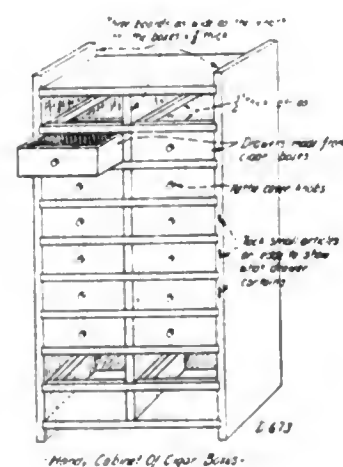
Making biscuits is a part of club work. Hazel Connor, a Four-H Club girl has done all the cooking for her family during the past three years.

all take turns with the stirring and the turning. By putting newspapers down on the floor it is easy to clean up afterwards.

Hilda Richmond.

Handy Cabinet

HERE is a small cabinet of cigar boxes for holding screws, stove bolts, hooks, buckles, rivets and other articles so valuable around the farm and so hard to find when wanted, which may be of interest to other readers.



The construction is shown quite clearly in the diagram (D-673) and is so simple that any one can easily make one. The three boards are placed just far enough apart to take in two cigar boxes endwise. Different methods can be used for putting the vertical and horizontal boards together.

The drawer or box pulls are kettle cover knobs which can be obtained for a few cents each. To indicate what is in each box, I tack a sample on the side board as shown, although they can be fastened directly to the box front if preferred. I. W. D.

The Funny Side

Harry Lauder said at one of the innumerable banquets given him by the Caledonians of America:

"I am a Scot. The other day I met a man who asked me what a Scot was and I up and says: 'A Scot, my dear boy, is a man who keeps the Sabbath and everythin' else he can lay his hands on.'"

Miller's ice house caught fire, and though a determined effort was made to save the building from the flames, it burned to the ground. With it

twenty thousand pounds of ice was reduced to ashes.—Item in Newspaper.

The first thing some people want when they get a little money is a car; then the first thing they want when they get a car is a little money.

Courtesy is the quality that keeps a woman standing when a departing guest stands at the open screen and lets flies in.

Mrs. Noah—"Noah, dear, what can be the matter with the camel?"
Mr. Noah—"The poor beast has both the fleas."

Little Folks' Corner

Timmy Twitchet to the Rescue

By RUTH PLUMLY THOMPSON

TIMMY TWITCHET, after a healthful and exciting summer in the Bird House down in the garden, had returned to his old colonial doll house in the attic. It was fall, and the garden a bit too chilly for the little mouse gentleman. So, packing up his cardboard suit case, his camp bed and chair, Timmy had flown home on the back of a carrier pigeon.

The village had turned out in a body to welcome him, for Timmy was Mayor of the small mouse town in the attic and a great favorite with everybody. There had been speeches and parades and so much merry-making, the Mayor was quite worn out, and at eight o'clock after distributing the small gifts and souvenirs he had brought from the garden, Timmy retired, and before nine was fast asleep in the comfortable doll four poster.

In the midst of a cozy dream and just as he was rescuing a Mouse Princess from a robber rat, a terrific blow on the head rudely awakened him.

"Mouseamercy!" gasped Timmy Twitchet sitting up in bed. "Mouse ears, tails, paws and whiskers!" The picture of his parents, which he had had enlarged and placed over his dresser, was hanging around his neck, while everything else in the room was prancing round and round like beasts on a merry-go-round. "Is it really happening, or just a nightmare?" muttered Timmy rubbing his head in dazed dismay. Then, as horrible thumps, rumbles, creaks and crash-

Patriotic Contest Answers

List No. 1

1. Virginia Dare.
2. Forty-three.
3. June 15, 1775.
4. Thirty-three hours; twenty-nine minutes.
5. May, 1927.
6. Zachary Taylor.
7. John Adams.

List No. 2

1. Jeannette Rankin of Montana who served in the 65th Congress, 1917-1919.
2. Wyoming, where the woman suffrage law went into effect December 10, 1893.
3. Two.
4. Nellie Taylor Ross, Wyoming; Miriam A. Ferguson, Texas.
5. August 26, 1920.
6. Russia.
7. \$7,200,000.
8. 1867.
9. September, 1902.
10. Kitty Hawk, North Carolina by Orville and Wilbur Wright.

List No. 3

1. Martin Van Buren.
2. 1840.
3. Zachary Taylor.
4. James Buchanan.
5. Sir Walter Raleigh.
6. Muddy Water.
7. April 18, 1906.
8. September 17, 1787.
9. Fifty-six.

List No. 4

1. Andrew Mellon.
2. Maryland—Black-Eyed Susan. New Jersey—Violet. West Virginia—Rhododendron.
3. Contestants were to suggest flower for Pennsylvania.
4. Virtue, Liberty and Independence.
5. 45,125.
6. Wyoming.
7. Rhode Island.
8. New Hampshire, Rhode Island, Connecticut, Massachusetts, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, North and South Carolina, Georgia.
9. \$7,200,000.
10. Watch for prize winners next week.

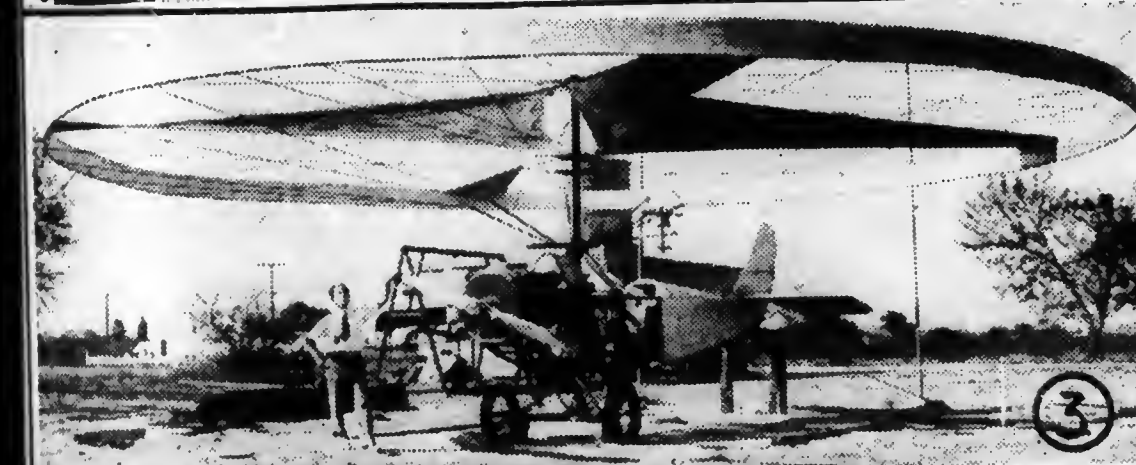
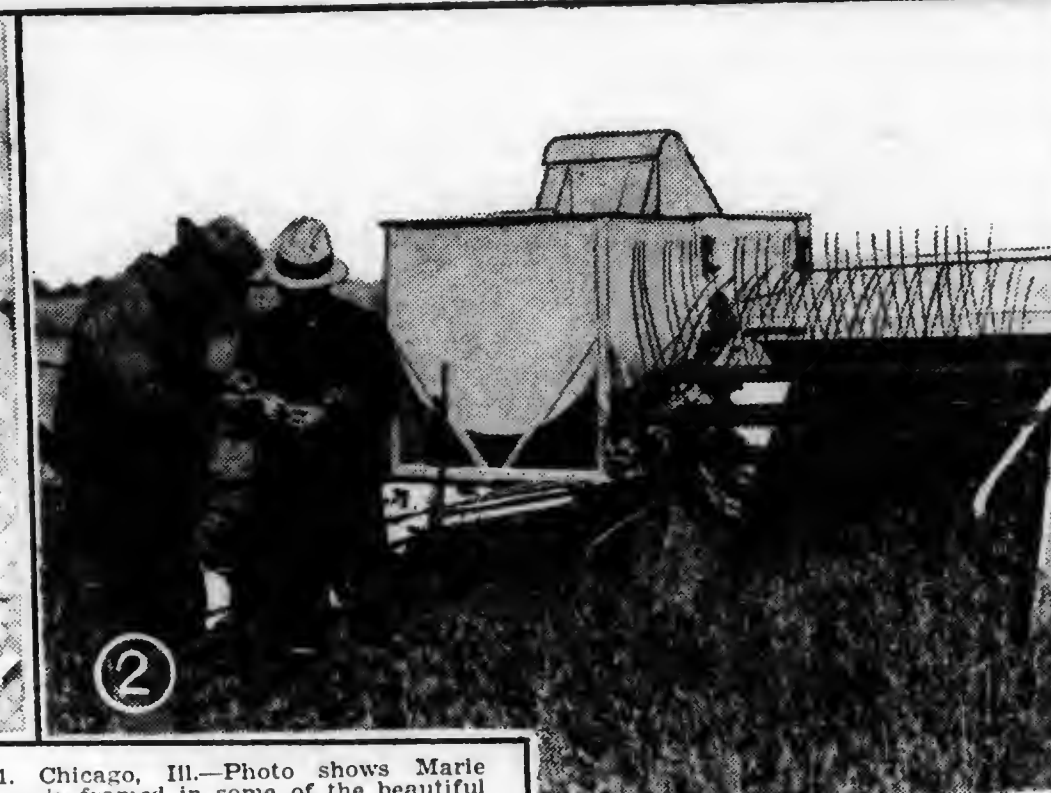
Coloring the Parrot

Sarah Anne Stewart, Evelyn Gray, Ray C. Christman, Mildred Rodgers, Willard Chedwidden, Dorothy L. Van Dyke, Grace Bratton, Mary Forney, Jean Hoffman.

PASSING EVENTS IN PICTURES



1. Chicago, Ill.—Photo shows Marie Brucyis framed in some of the beautiful "mums" on display at the Annual Chicago Chrysanthemum Show.
2. Chicago, Ill.—A "baby" combine which threshes the grain with a light-weight cylindrical wire brush instead of heavy steel cylinders and concaves is a recent development in farm machinery. It weighs only 3,000 pounds, cuts a five-foot swath and is intended for fields too small for the larger combines.
3. Bell, Calif.—Combining the principles of the Flettner rotor, the gyroscope, the airplane and centrifugal force, this radically-designed ship, christened "Hello-Gyro-Copter" by its inventor, Jesse D. Langdon, who is preparing it for its test flights.



4. Three cocky little fighting planes of the Aircraft Carrier Squadron demonstrate their ability to maneuver in close quarters in this "airplane sandwich" at 150 miles per hour.
5. Gothenburg, Neb.—An unusual shot of a "twister," showing the funnel starting from clouds, attached to the pond and whirling the water back up into the clouds.
6. Expressing the gratitude of the United States to those who gave their lives in its cause during the World War, President Herbert Hoover placed a huge wreath upon the simple slab which marks the last resting place of the Unknown Soldier in the Arlington National Cemetery on Armistice Day.



(Continued on Page 19)

Tune in on **THE SUNSHINE COUNSELLOR** . . . Poultry Market Reports . . .
Sunshine Health Talks. Every Friday at 12:30 noon, your time, Stations KYW, WCAU, KPO,
KWK, WIEN, KFAI, KOA, WOC, WHO, WOW, WDAF. At 12:45 p. m. Station KSTP. At 1:30
p. m. Stations KDKA, WLW, WJR. *Coast-to-Coast Broadcast*



LARRO

Keeps Her Hitting On All Four...

Do you have any two or three teated cows in your herd?

A cow with a lost quarter or two can no more produce milk at a profit than a carbon-clogged motor can pull a car up a hill on two cylinders. **You've got to keep them hitting on "all four"!**

Variation in the cow's feed upsets her health—causes off-feed condition and constipation—results in UDDER TROUBLE and very often lost quarters.

Larro Dairy Ration is a protector of good udders for the same reason—it is an unequalled milk producer. **Larro builds health that boosts production and holds it up.** Larro builds health that eliminates off-feed days, constipation and UDDER TROUBLE.

Larro Health and greater dairy profits are facts—facts that prove themselves wherever and whenever Larro is fed—for Larro is always the same, yesterday—today—tomorrow.

Put your cows on Larro! Keep them "hitting on all four" then—you'll get better results from every cow—and more profit.



THE LARROE MILLING COMPANY
DETROIT, MICHIGAN

Larro

FEEDS THAT DO NOT VARY
FOR POULTRY, HOGS AND DAIRY

Larro Family Flour, best for Bread,
Biscuits, Cakes and Pies



New Factory and Eastern Offices

We have just built a new Grange factory and opened two new Eastern offices to care for ever-increasing volume and give still lower costs through increased production.

Factory at Netcong, N. J. (on D. L. & W. midway between N. Y. C. and Phila.). Offices at Hackettstown, and Springfield, Mass.

Big savings in freight, production and erection costs, plus quicker service, "on time" delivery, etc., will mean much to silo purchasers this year when lower costs are needed. Write at once for our new schedule of prices on Grange Silos, Concrete Silos or Wood. Exclusive features, free outside. Now Jersey dairymen write direct to us at Hackettstown, N.J.

GRANGE SILO CO., (Home Office) RED CREEK, N. Y.

When writing advertisers please mention Pennsylvania Farmer

Farm & Dairy

By L. W. LIGHTY

It is a fact that very often little thought or attention is given to handling of the cows during the period when they are dry. Trouble and loss often can be traced to this thoughtlessness.

The cow that has yielded well for ten months or more has had a siege of hard and somewhat devitalizing work. She needs rest and nourishment. The feed should make the coat sleek, should develop a good udder and keep the bowels open. With an abundance of good roughage I found nothing as effective as plenty of good sweet wheat bran with enough corn and oats to make the feed palatable. It is cooling, nourishing and bulky. If the udder was not coming along as I thought it should I added linseed oilmeal to the feed. This also keeps the bowels free and makes a smooth coat.

Unusual Feeds or Feed Combinations

One man has just half the roughage he needs and finds the price of good mixed hay to be \$29 a ton, while he can buy good oats at \$27. He asks me if the oats might be substituted for the hay.

At the prices quoted oats surely would be the cheaper. Mixed hay contains 3.6 pounds of protein to the hundred pounds and 40.85 therms of energy. Oats contains 8.7 pounds of protein and 67.56 therms of energy. You see the oats is worth more than twice as much as the hay.

This farmer has large Jerseys. If he would feed eight pounds of hay and six pounds of oats it would make the equivalent of a good roughage ration. In fact the oats is quite a little better than alfalfa hay and he would have a splendid ration so far. He is buying and feeding a mixed feed analyzing 20 per cent protein. On the average he should feed one pound of this for every three pounds of milk produced. Also he will do well to secure a supply of oats while he can get it at such a low price.

Another party has an opportunity to buy good clover hay in the mow at \$26 a ton, or he can buy of the dealer ground alfalfa at \$31 a ton. He wishes to know which is the better purchase.

A theoretical answer is easy which would be in favor of the alfalfa, but before I would buy the ground alfalfa I would make a close examination. Often it is rich in fiber, sometimes it contains foreign matter of little value and runs comparatively low in protein, and then the red clover is surely well the protein in the alfalfa would cost 4c a pound less but this advantage is easily offset if the alfalfa was old, rank, weedy and cured under unfavorable conditions. I would be inclined to buy the red clover hay if I were sure of its quality.

Cull and Cull Hard

I had a talk with several of our large poultry keepers lately. They told me the price of eggs compelled them to cull harder than ever. The loafer hens simply must all be eliminated or there is no profit left.

Now there are just hundreds of loafer cows in the stables of the farmers and in hundreds of cases if these loafer cows were sent to the block and made into good bologna the remaining cows could be fed all the roughage they would clean up and a profit could be made out of them. But if the boarder cows are kept they will eat up all the profit and often more and do it very easily under the condition we are placed this season.

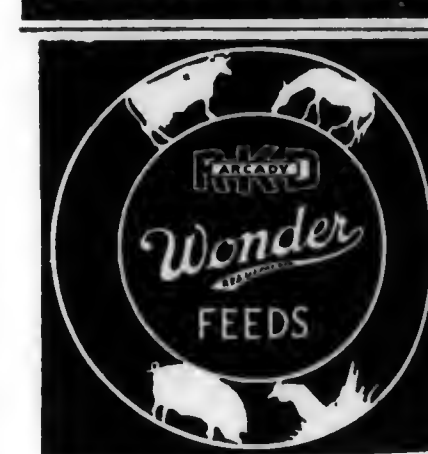
If there ever was a time that called loudly for real hard culling it is now. The farmer who does not heed this call will hardly deserve much sympathy next spring when his difficulties have multiplied. And very surely they will be multiplied if he feeds cows that fail to pay for their keep.



Grooming makes possible the production of cleaner milk, says a recent U. S. Dept. of Agriculture bulletin—and now comes machine grooming to make cows really clean—"a thousand times better than the old way" say Hinman users, who are profiting in improved quality and quantity of milk production. Attractive, efficient, conveniently portable, the H. I. a. a. Groomer is a dairy necessity that saves its cost. Write to the dealer for particulars of our live demonstration.



HINMAN MILKING MACHINE CO., INC.
Dept. F.
Owens, N. Y.



Whether it is a dairy feed or a mash, for hogs or horses, Arcady Wonder Feeds are the finest you can buy—mixed by special formulas to give your stock and poultry the maximum in feeding. Your dealer carries Arcady Wonder Feeds. See him today or write us direct.

ARCADY FARMS MILLING COMPANY
Dept. 32, Brooks Building, Chicago, Ill.

FREE WRITE TODAY FOR NEW POULTRY BOOK

CLIP

Cows for More Milk

1. Clipped cows give more milk, clean milk, better milk.
2. Clipped cows produce more milk at less feed cost. 3. Clipped cows are thoroughly cleaned simply by wiping with a damp cloth before milking.

Stewart Clippers
Boost Profits
Progressive dairymen are boosting their milk profits as high as \$140 a month for each cow by using a Stewart Clipper. A clipping machine will pay for itself every month on a farm having 4 milk cows and 3 horses.

Write for Free Catalog today! Describes full line of Stewart Clippers. Hand models as low as \$14; complete 5 1/2 h.p. electric as low as \$45.00 f.o.b. Chicago. Also tells the extra profit through clipping. At your dealer's or sent direct for \$2.00 down, balance on delivery. Satisfaction guaranteed or money back.

Chicago Flexible Shaft Company
5632 Roosevelt Rd., Chicago

ADVERTISING reduces the cost of products that add pleasure and comfort to living.

T. A. Reports

Jackson, Tioga County
The Jackson Cow-Testing Association finished its third year with whole-year members. There were 19 cows in the Association during or part of the year. The results for the three years for the Association are as follows:

Ar. No. Cows	Lbs. Milk	Lbs. Fat
293.33	7791	324.8
494.67	7655	314.2
443.33	8148	325.9

Nineteen herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Milk	Fat
D. Prutman	R.&G.H.	12941	481.1
W. Bly	R.H.	7985	432.0
R. Baker	R.H.	12517	430.3
W. Deming	R.H.	7896	410.1
A. Segar	R.&G.H.	10361	365.5
E. J. Hamilton	R.H.	8023	353.6
J. Card	R.H.	10346	352.5
E. Spenser	R.H.	6832	346.3
P. Smith	G.H.	6699	343.3
W. G. Miller	R.&G.H.	9711	338.0
J. Allen	R.H.	7401	335.9
J. H. Hurl	Mixed	8136	334.8
P. Peterson	G.H.	9323	334.2
J. Allen, Jr.	R.&G.H.	9298	329.3
S. Smith	R.&G.H.	5292	310.1
E. J. Hamilton	R.H.	6505	303.2
D. Speer	R.&G.G.	6430	302.7

Ward McConnell, Paul P. Korb, County Agent.

Lawrence County

The Lawrence County Cow-Testing Association completed its 19th year with 35 whole-year and 10 part-year members. The total number of cows in the Association during all or part of the year was 19. The results for the ten years are as follows:

Ar. No. Cows	Lbs. Milk	Lbs. Fat
293.92	6218	251.0
274.99	6288	265.9
234.50	6623	286.2
265.30	6827	303.2
240.21	6927	296.6
261.11	7140	299.6
229.31	6758	287.4
293.08	6601	268.4
319.56	6890	301.8
338.38	6839	289.3

Fifteen herds with an average of five or more cows per herd exceeded average production of 300 pounds of butterfat per cow. A complete list of these herds is as follows:

Owner	Breed	Milk	Fat
E. Sampson	R.H.	6599	403.9
R. Elder	R.H.	11,305	363.2
A. Freed	R.H.	11,265	362.2
Thompson	R.H.	6,723	362.1
L. Curley	R.H.	6,823	336.5
C. Post	R.H.	10,331	342.1
V. Smith	G.H.&G.J.	7,082	322.4
W. Bronson	R.H.	6,276	328.3
G. Moore & Son	R.H.	6,526	321.3
C. Haskett	R.H.	6,277	321.3
Chad Brock	R.G.	6,462	319.0
W. McMillen & Son	R.H.	9,000	309.4
P. Patterson	R.H.	5,942	301.4
A. Bak & Sons	R.H.	5,963	300.0
W. Ludwig	R.H.	8,571	300.0

H. R. McCulloch, County Agent.

Venango County

The Venango County Cow-Testing Association finished its sixth year with fourteen whole-year and 10 part-year members. There were 19 cows in the Association during or part of the year. The results for the Association for the six years are as follows:

Ar. No. Cows	Lbs. Milk	Lbs. Fat
380.91	7698	306.2
261.16	9004	329.7
217.39	9259	359.9
301.69	8266	338.7
243.01	9561	359.0
319.37	9237	354.0

Six herds with an average of five or more cows exceeded an average production of 300 pounds of butterfat. A complete list of these herds follows:

Owner	Breed	Milk	Fat
W. State School	R.H.	12,911	445.0
H. Hancox	Mixed	10,106	440.6
W. O. Dempsey	Mixed	7,798	338.8
J. Dempsey	Mixed	6,632	321.0
W. Morrison	R.&G.G.	6,941	317.7
W. Shaffer	R.&G.G.	7,212	315.2

E. G. Iff, County Agent.

AMCO FEEDS

BALANCE WHAT YOU HAVE

YOUR silage, hay, and grains are not the same as last year's—and they are not the same as your neighbor's. A good, profitable feed must combine with these various home-grown materials to make a balanced, economical ration. That is why Amco Feed Service mixes six different dairy feeds, (besides 12% Fitting Ration for dry cows, young stock, and herd sires, and June Pasture to supply stimulating green feed).

It is always sound business to feed your dairy cows adequately. And now more than ever, because feed prices are relatively much lower than the price of milk. Waste ingredients, or unbalanced ingredients, spend your money without return. But a good dairy feed will keep your herd in maximum production and good condition—with greater profits to show.

Use the Amco Feeds which fit your own conditions. They are mixed on open formulas, so you don't have to guess whether the amounts are balanced or not. You can see that they are by looking at the tag attached to each bag.

SEE YOUR NEAREST AMCO AGENT FOR THESE PROFIT-MAKING FEEDS

AMCO 12% FITTING RATION
AMCO 16% SUCRENE DAIRY
AMCO 20% DAIRY
AMCO 20% NATIONAL DAIRY
AMCO 24% DAIRY
AMCO 24% UNIVERSAL DAIRY
AMCO 32% SUPPLEMENTAL
AMCO JUNE PASTURE



DIST. OFFICE, MUNCY, PA.

SWINE

PIONEER HERD—POLAND-CHINAS of approved blood lines. Service hours, bred sows, fall pigs. You will want a look in at this splendid herd. Satisfactory purchases in many states. Priced low. Reasonable. Address: C. S. Eppler, Zanesville, O.

BIG SPOTTED POLAND-CHINA sows and gilts, bred for March. Early feeding type. SHILOH, Ohio.

BIO TYPE POLAND-CHINA BRED GILTS, the only feeding kind. Satisfactory. Price right. Registered. O. C. POWELL, Ada, Ohio.

FOR SALE. 40 feeding pigs, six to eight weeks old. Price \$5.00 per pair at farm. Foxburg, Pa.

Large Berkshires. Grand lot of pigs, with service hours, bred gilts, service hours. J. A. HANDSHEW, Star Route, Shippensburg, Pa.

Low Price on Big Type Pedigreed Chester Whites. Service hours, pigs and bred sows. Champion blood. Must please. C. E. CASSELL, Hershey, Pa.

O.I.C. choice sow pigs, 8 wks. old, \$10.00 each, with pedigree. Guar. to please. For info. Halls Calvin, R. 2, Beaver Falls, Pa.

SHEEP

Registered Shropshire Ewes bred to imported ram. L. M. HEIGHWAY, Bluffton, Ohio.

REGISTERED SHROPSHIRE. Choice ewes, bred to an extra good, thick fleshed ram. Priced low. A. F. MERRELL, Geneva, Ohio.

REGISTERED SHROPSHIRE EWES, bred to imported ram. Priced low. Agosta, Ohio.

HORSES

BELGIANS We are offering stallions and mares from yearlings to mature horses. Priced to show them and quite interesting prices. RYLLMEDE FARM, Beaver, Pa.

DAIRY CATTLE

AYSHIRE CATTLE of the best blood lines. Herd T. H. Accredited. Animals of both sex and all ages. Geo. B. McConnell, Wellington, Ohio.

CATTLE

BUCK & DOE RUN VALLEY FARMS Hereford Cattle—Poland-China Hogs—Hampshire Pigs—Draft Horses. THE SAINT ARVOZ COMPANY, Nortonville, Penna.

HEREFORDS Accredited herd. Priced to sell. Some individuals in bull-tight now. GEO. O. COCHRAN, Dawson, Pa.

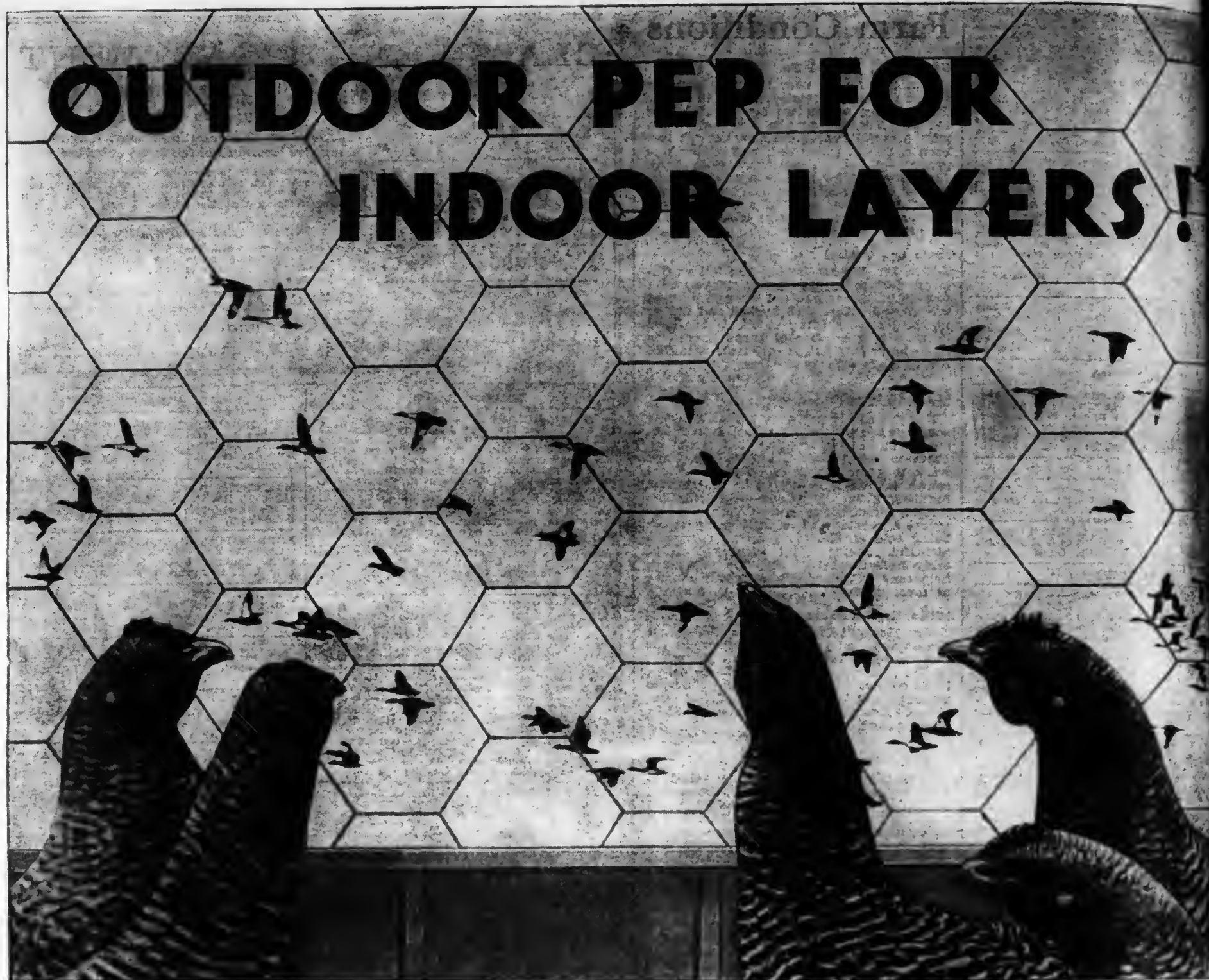
FIVE PURE-BRED SHORTHORN BULLS—Good individuals. From good milking dams. Ten to fifteen months old. Price \$8.00 to \$10.00. S. M. Dunlap & Sons, R. D. 1, Cadiz, Ohio.

Angus Cattle at reasonable prices. Write BAYARD BROS., Waynesburg, Pa.

GOATS

GOATS: Thoroughbred, from world's best milkers. Calif. Giant Nubians. Two-bushes. \$50 each. J. Sini, Goldsborough, Oatery, Mounton, Pa.

Many of our advertisers offer to send booklets and other descriptive material upon request. You will profit by asking for them and reading them with care. Make sure that the product advertised exactly fits your need. Mention the fact that you saw their advertisement in the PENNSYLVANIA FARMER



This feed, complete in vitamins, makes up what indoor layers lose by being confined

Even city flat-dwellers don't live as artificial a life as the average laying hen today. Yet we ask her to do many times the work that Nature intended.

That's why Pratts put an abundance of Sunshine Vitamin D into their buttermilk laying mash. It gives layers all the health-spark of rich June sunshine right in the shortest, darkest days of the year. You don't have to buy cod-liver oil or any other special vitamin D mixture if you use Pratts. Here, right in the feed, is all laying hens need to keep them alive, vigorous, healthy, productive as birds on summer range.

Vitamin D is only one of the four vitamins necessary to poultry that Pratts guarantee in this mash. Both Vitamins A and B are essential to eggs, body weight, constitutional vigor. Unless food contains enough of them to be effective, the egg value of the best proteins, carbohydrates, fats and minerals is lost.



And here's still another great service that few ever expected from a laying mash! A guaranteed supply of Vitamin E to prevent sterile eggs that result from a feed lack of this vitamin!

Think of it. A feed for laying hens that eliminates one of the big causes of unhatchable eggs, lack of Vitamin E. What a difference it makes. No longer can heavy laying so drain breeders of this vitamin that the eggs you most want to be fertile, turn out sterile. Feed them Pratts. Build up and replenish this precious Vitamin E with every mouthful of feed they take in.

Complete in Vitamins! A great plus value to the laying mash always famous for its well balanced nourishment. Its splendid animal and cereal proteins, carbohydrates, fats. And essential min-

erals like iodine, calcium, phosphorus, etc. Yet with all this added value, Pratts cost not one penny more than any other good feed.

We urge you to see your Pratt dealer. He also recommends Pratts broiler mash for making big, fat broilers in record time, either semi-confined or battery feeding. And Pratts buttermilk fattening mash for making holiday poultry.

THE POULTRYMAN'S VITAMIN GUIDE FREE

The vitamin story is as important as it is mysterious to most of us. We had a man who knows a lot about them make up a poultry vitamin guide, sent free and paid to any poultryman on request, Pratt Food Co., Walnut St., Philadelphia, Pa., Dept. 3.

Name _____

Town _____

R. F. D. _____ State _____

PRATTS Buttermilk LAYING MASH
• COMPLETE IN VITAMINS •

PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

December 13, 1930



Philadelphia

Pittsburgh

Harrisburg

You'll never lose TIRE CHAINS with the McKAY FASTENER



and you'll get more
TIRE CHAIN
MILEAGE

— for the McKay Fastener is the best fastener on the market. 1—Holds with a never-let-go grip. 2—It's the easiest fastener to open and close. 3—Its operation is not affected by snow, ice, mud or rust. 4—No tools of any kind necessary in opening and closing.

And McKays will save you money . . . because of the extra mileage built into them. McKays are hardened by a special process . . . they're tough . . . they last . . . you can treat 'em rough.

When you need chains, ask for McKays.

UNITED STATES CHAIN & FORGING COMPANY
Union Trust Building. Pittsburgh, Pa.

The New Silvery Rust-Resisting

McKAY TIRE CHAINS

Now you can
get
McKAY
Steel or Rubber
Tire Chains

Farm Facts and Fancies

By ALVA AGEE

THE Pennsylvania Experiment Station has found that cultivation of corn, potatoes, beans and mangels does not pay where there are no weeds to be controlled. Various stations in the past have made similar tests with similar results. Yields were not increased at all.

It appears that the only problem would be to kill out all the weed seed. Then the man specializing in corn could plant in May, go joy-riding until September and return home to harvest just as big a crop as his neighbor who sweated through the summer. It would be a great life and one based on the seeming definite results of scientific research.

There would be the period of weed-killing until the seed supply in the soil was destroyed, and then a life-long future of glorious freedom except at planting and harvesting time. These results confirm those of some other scientists—cultivation, it would appear, does not conserve moisture, free plant food or do anything of value except kill weeds. When we thought otherwise, we were guessing, it would appear, and guessing wrong.

But:

How many of us have not gone into a corn field after some drouth, followed by a good heavy shower, and within two or three days seen the leaves curling up where we had not broken the crust as soon as the soil was dry enough for cultivation? The packed surface seemed to let more moisture escape than came in the shower.

Have we not prepared land for seeding to wheat, had a rain that packed the surface, left it untouched and found the ground too dry for seeding while land harrowed soon as possible after the rain had a supply of moisture and could be seeded safely? Who has not cultivated a part of a field soon after a rain, been interrupted by other work, and returned later to see the plants of the cultivated part returning thanks for timely attention?

The Shade of Jethro Tull

The station gave some plots eight cultivations, some three and some none. The test has been running for years. The bulletin says: "The quantity of available plant foods, nitrates and total soluble salts has not been increased by frequent cultivation."

Now we should grant that that Englishman of olden times, Jethro Tull, went a bit too far when he claimed that "tillage is manure." And yet what could have been the observation of Jethro Tull on the effect of cultivation that led him to hazard so broad a statement? Sure, he saw something that put the idea into his head, and down through the years practical farmers have been seeing something that encouraged them to run their cultivators under the direct rays of a June and July sun.

What a Waste!

What an amount of sweat there has been, chasing a delusion! No more availability of plant food, no more moisture conserved, no increase in yield of crop secured, we are told. It seems a sort of tragedy—it is one. What an amount of ink has been wasted by all the farm writers of the past when discussing the benefits of cultivation. Run through the file of any good farm paper for fifty years, glance through the hundreds of books on practical farming, and see all that has been said.

Our station scientists say that the results they have obtained probably apply to most upland soil of Pennsylvania, and if so they apply to the soils of other states. Other stations have made similar reports. These scientists may be right—it is a way they usually have—but I reckon that the

most of us in this instance will stay entrenched behind old belief. A lively prejudice often is a good thing.

The Property Tax

A reader wants to know "who can do something about the injustice of the tax burden? Who can and will fight this thing for us?" he asks. The matter rests with those now paying a property tax. The degree of ability of one to provide for himself through net income should largely determine the size of the contribution he should make to cost of government.

Why should farmers expect those who are now exempt from any or much sharing in costs of government to press for any change? One wonders why those carrying the load are not a unit in demanding that an unfair measure be laid aside. The owners of land and buildings and livestock, and whatever intangibles an owner may care to report to the assessor, meet much of public costs almost regardless of any net income from which it could be paid, and others escape. One's net income should be a leading factor in deciding what he should pay.

A Change in Agriculture

An agricultural economist whose judgment I value writes: "The Farm Board under any conditions cannot meet the expectations of the farmers. There is a great deal more than marketing that must be adjusted in farm products and farm life."

One of our greatest merchants says that production and distribution along every line of industry must be cheapened, and will be cheapened, so that demand will equal supply. The feeling grows that mass production in industry is bound to increase, and that agriculture cannot stand out alone as a field for small individual effort.

I have believed that a corporation, using hired labor, could not drive out the average American farmer, and still believe it, but improved labor-saving machinery reduces the importance of the labor factor on great tracts of farming land, and it is disconcerting to read of the absorption of small farms by these extensive farming enterprises.

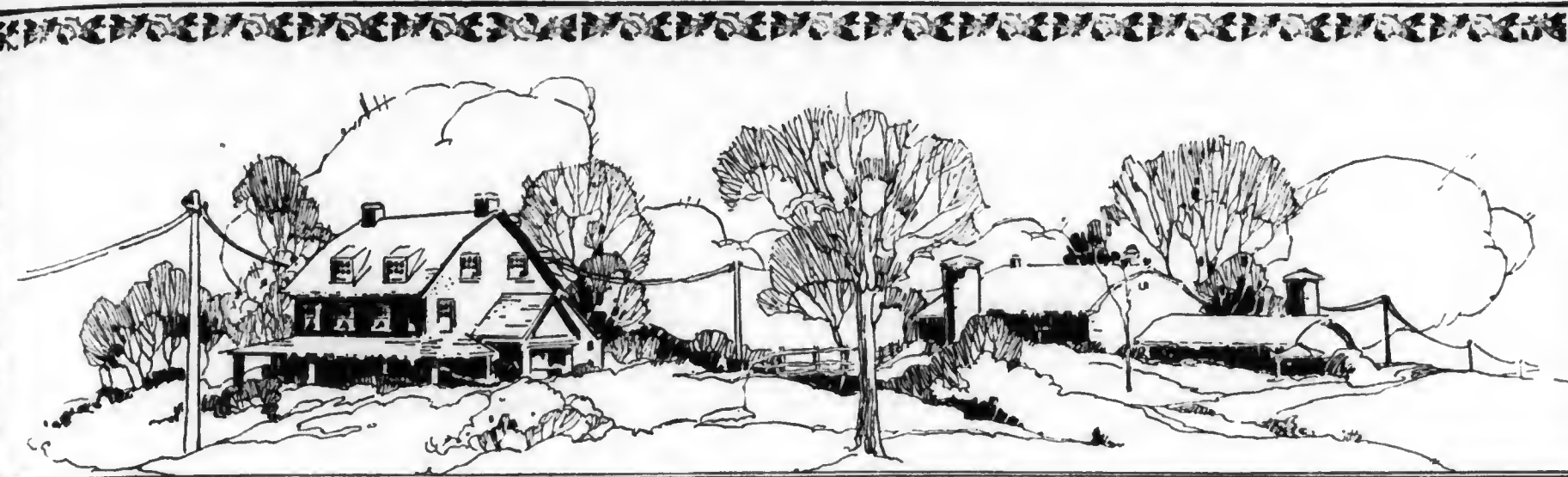
It is hard for any group or industry to stand out against a general trend, and that trend today is toward mass production. The situation is puzzling and disturbing. What this country needs is certainty that many millions of its citizens will remain the independent owners of farm homes.

Expect Large Poultry Show

HOUSED for the first time in the new exhibition building at Harrisburg, the poultry display of the 1931 Pennsylvania Farm Show, January 19 to 23, is expected to be the largest ever brought together there, says John Vandervort, head of poultry extension at the Pennsylvania State College and superintendent of poultry at the show. Nearly one acre of floor space will be filled with coops. Eight thousand dollars will be distributed in prizes to winners. Fourteen gold medals will go to the owners of champions.

Features of the poultry show will be the National Silver Wyandotte Meet, and the Pennsylvania State Branch Rhode Island Red and Brown Leghorn Meets. Turkey exhibits will include one of the largest displays of Bronze birds ever staged in the East. Vandervort expects that 1,000 Bantams will be entered in this division of the show.

There also will be a large egg show. Each year this part of the big state exposition has grown. With \$500 in prizes at stake, Keystone poultrymen will enter more high quality eggs than previously, Vandervort anticipates.



"Heap on more wood! The wind is chill:
But let it whistle as it will,
We'll keep our Christmas merry still."

Dear Santa Claus:

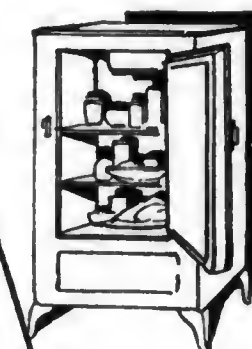
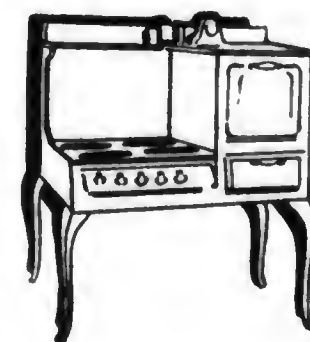
We know you try to make everyone happy at Christmas time, so we are going to tell you how much our large family of users of electricity want about the house and the farm.

With the co-operation of the rural people, we have succeeded in taking service out to some 140,000 rural customers, of which about 35,000 are farmers. For some 15,000 this will be the first Christmas that they have had electricity in their homes. All of these, whether old or new customers, want many additional appliances, so please fill your pack with enough electrical presents for each member of the family for these thousands of homes. True, this is a big task but Santa Claus has always done the seemingly impossible.

There is something electric for each member of the family, so letters will come to you from mothers and dads, brothers and sisters, and little babes, too. Mother would be delighted with an electric range, a refrigerator or a vacuum cleaner, to work for her every day in the year . . . a constant reminder of a perfect Christmas. The boys will like beautiful, non-tar-nishing toasters, percolators and waffle irons. Heating pads, air heaters, and radios will be enjoyed by all. More lights are needed. A bridge light at each easy chair, a light at the piano and at the study desk for the children, and a light over each bed . . . all these add a touch of comfort and charm. The number of beautiful and useful gifts is almost endless, so be sure that you have a large supply of all kinds ready for Christmas Eve.

Do the best you can, Santa Claus, to visit these homes. You will find them more happy and cheerful than ever before, but wanting many, many things electrical, for they appreciate that darkness has been banished, and drudgery will go wherever electricity is put to work.

Yours for a Merry Christmas and a Prosperous
New Year in the Rural Homes of Pennsylvania



Bradford Electric Company
Chester County Electric Company
Chester Valley Electric Company
Duquesne Light Company
Edison Electric Company
Edison Light & Power Company
Eric County Electric Company
Erie Lighting Company

Keystone Public Service Company
Luzerne County Gas & Electric Company
Metropolitan Edison Company
Northern Pennsylvania Power Company
Penn Central Light & Power Company
Pennsylvania Electric Company
Pennsylvania Power & Light Company
Pennsylvania Power Company

Philadelphia Electric Company
Scranton Electric Company
South Penn Electric Company
Southern Pennsylvania Power Company
Sullivan County Gas & Electric Company
Wellshoro Electric Company
West Penn Power Company



"Don't gamble with your radio enjoyment... USE RCA RADIOTRONS"

says MCMURDO SILVER
President
SILVER-MARSHALL, INC.

"RADIO owners cannot be too often warned against careless vacuum tube buying. Exhaustive tests by our engineering staff have demonstrated that RCA Radiotrons have the quality which provides the best insurance of the fine performance built into every Silver Radio. RCA Radiotron quality and dependability safeguard against interference, weak signals, fading and other troubles caused by inferior tubes. We say to all owners of Silver Radio: 'Don't gamble with your radio enjoyment by using inferior tubes when genuine RCA Radiotrons are easy to get anywhere.'"



RADIO ENGINEERS ADVISE:

Replace all the vacuum tubes in your radio set with RCA Radiotrons at least once a year. This is the only sure way to maintain good performance and minimize disagreeable noises and other troubles caused by inferior tubes. RCA Radiotrons will give you the maximum in selectivity, sensitivity and tone quality.

Old tubes may impair the performance of the new.

RCA RADIOTRON CO., INC. HARRISON, N.J.

RCA Radiotrons

THE HEART OF YOUR RADIO

A Christmas Gift

THAT WILL BE REMEMBERED

If you want to send your friends or relatives a Christmas Gift that will be remembered, send them a Gift Subscription. For months to come your friends will keep thanking you for your thoughtful way of saying "Merry Christmas."

Here is a Special Club, consisting of Four High Class Periodicals, for only \$1.00. We will send a card to your friend announcing the gift and the name of the donor.

XMAS GIFT CLUB

Pennsylvania Farmer 1 Year
Poultry Item 1 Year
Farm Mechanics 1 Year
Country Home 1 Year

All for only \$1.00—Value \$1.75

Something pertaining to every branch of the farming industry and something interesting and instructive to every member of the household.

Just order Xmas Gift Club. Give the name and address of the party who is to receive it, also your name and address and we will do the rest.

PENNSYLVANIA FARMER 7301 Penn Ave., Pittsburgh, Pa.

PLOW 5 ACRES A DAY WITH YOUR OLD FORD

PULLFORD gives car power instead of speed. Quickly attached to old or new Ford. Economical tractor—no expense when idle. Does work of 3 or 4 horses. Use it for plowing, harrowing, harvesting, hauling. Write now for catalog. PULLFORD CO. 2870 Elm St., Quincy, Ill.

TANK HEATER

BURNS OIL
This new tank heater burns 14 to 16 hours on 1 gal. kerosene. No smoke, odor, noise. Guaranteed. Write for Special Introduction. Free Offer. Write to: The Waterbury and Putnam Companies, Waterbury, Conn. or 1000 Broadway, New York, N.Y.

FARQUHAR SAW-MILLS

Built with Roller Bearings and Positive Geared Set Works.
Fast, Accurate Cutting
For Steam, Tractor or Gas Motor
A. B. FARQUHAR CO., Limited, Box 646, YORK, PA.

NESHAMINY GARDENS

By R. P. KESTER

THANKSGIVING articles are usually written in advance of Thanksgiving Day in preparation for the day. But it seems that it required the day to prepare me to write something about it.

I am firmly convinced that the American people are in danger of losing the spirit of thankfulness as an abiding characteristic of their natures. We have become so practical and so scientifically intelligent, or think we are, that we have unconsciously dropped the feeling of dependence on any power or intelligence other than that of human beings. Even though we may have outgrown the ideas and conceptions held by people two hundred years ago, and understand better the laws of cause and effect, aren't there still some things which are beyond the ken of human intelligence and ability?

A well-dressed man of middle age drove up in his rather expensive car and stopped before a nearby bank. He went in and drew a check and as he presented it to the cashier said: "I'll have to have a little money for Thanksgiving, though what we have to be thankful for this year is more than I can see."

In strict justice, that man does not deserve the evident good things he has. He has plenty of property, a good home, a fine family and good health. Simply because the economic conditions are such that he was not at the time making money hand over fist he was as pouty as a spoiled child.

There is another kind of selfishness which I heard voiced yesterday (Thanksgiving Day). It was thankfulness that the condition was not so bad as that of many nations; that the Supreme Being had evidently showered blessings upon Americans while He was killing and starving thousands elsewhere. I was reminded of the Pharisee and the Publican praying on the street corner.

They who possess a spirit of genuine thankfulness and appreciation have something for which to be thankful. Such people have happiness when others do not.

Of course there are thousands of people this year who are excusably anxious over their condition. Hundreds of thousands are without work and consequently the future looks dark to them. But however unpromising things may be at the moment there is cause for thankfulness in the knowledge that few if any will actually perish from cold or hunger, thanks to the generosity of the human heart and the intelligent provision of means to take care of such emergencies. We should be thankful that that worst of calamities—famine—is not our experience. We have an abundance of grain, meat, cotton, wool, fuel, etc., and means of securing it so as to sustain the lives of all, should it be necessary to make use of those means.

Again, we should be thankful for the chances we have had, even if we did squander our opportunities for a mess of pottage. And then there is cause for thankfulness for the chances that are sure to be ours in the future.

It may not be out of place here to call attention to a reversal of the relative condition of farmers with those of the industrial world. However, I shall do so in no Pharisaical spirit.

During the last few years the pity of the cities (even if it were a perfunctory pity) was poured out over the plight of the farmers. According to the economists and editors, and

even farm leaders and the farmers themselves, theirs was a pitiable condition. But after all, the terms prosperity and poverty are relative. In past years when industry and commerce, and those engaged in them, were making barrels of money, the profitless condition of agriculture was one for pity. But how is it now? Even though farmers are not making big profits the wolf is far from their doors. The barns, granaries, cellars and cupboards are full to overflowing. They have plenty to eat and to spare; they have homes and fuel, and no farmers are likely to be found in "flop houses" or bread lines. All that sumpin'?

Will Rogers, the first and greatest humorous prophet, says: "Our great trouble is that we have too much wheat, too much meat, too much cotton. This is the only country in the world that is starving to death in the midst of plenty."

There is a sharp barb of irony in that remark, and it can't be laughed off. The political leaders of the world proved themselves unfit for their task when the Great War occurred. And the industrial and commercial leaders up for trial before the bar of public opinion by virtue of this crisis. If so, will they be judged as incompetent?

Friendly Talks

By Edgar L. Vincent

"I READ a great deal about the importance of starting boys and girls on the right track as if that were all we have to do to ensure a correct life afterward. I am a farmer. I set out a little tree, using all possible pains to do the right thing. I know of no place where I failed; but something happened to the tree. It got a shunt off sideways and I never could straighten it after that. The question with me as I look out on the world today, it enough to give the young folks good start?"

This is a bit from a letter that came to me, and it touches a sore spot in our home life. Many a boy and girl who had the best of care in the world when young have gone sadly astray since going out into the world of themselves. Like our friend's little tree, these young folks meet with conditions which lead them to swerve from the side of right.

Long ago a man wiser than most men of our day said: "Train up a child in the way he should go, and when he is old he will not depart from it." Train up. Not start, but keep it. It is not enough to give the boy or girl a little while in the world and then send him out into a world where pitfalls lie on every hand and expect him to maintain an upright attitude to the end. Train up.

I wonder if we are as careful as we ought to be to live close to our boys and girls, not once in a while, but all the time? Do we hold ourselves so true to the right that they will respect us? Is our love for them so warm and tender that they will want to come to us with all their problems?

I know fathers and mothers who in this way keep their hold on their sons and daughters, so that the home is to them the best place on earth. It might be so with us. How much better would this world be if it were always so. Live close to boys and girls.

MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

PENNSYLVANIA FARMER

Published Weekly Established 1877

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of March 3, 1879.

President - - - Arthur Capper
Vice-President - - T. D. Harman
Vice-President - - George M. Slocum
Editor-in-Chief - - E. S. Bayard
Manager - - - Neff Laing

New York - - - 420 Lexington Ave.
Chicago - - - 203 No. Wabash Ave.
Detroit - - - 1632 W. Lafayette Blvd.
Philadelphia - - 1201 Chestnut St.
Cleveland - - - 1011 Rockwell Ave.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA.

Vol. 103

Pittsburgh, Pa., December 13, 1930

No. 24

Lessons from European Pasture Management

By J. B. ABBOTT

GERMANY uses for grazing a great deal of land which is far lighter than most of the pastures of the British Isles and consequently uses a great deal more potash on pasture land. Germany also uses for grazing a very considerable area of potash deficient peaty soil. Such soils, that of the peat experiment station at Kongsamoor, for example, are so seriously deficient in potash that they fail to respond to phosphatic fertilization until the potash deficiency is corrected. I have encountered numerous cases of that sort in America and not by any means confined to peaty soils either. Badly exhausted light upland soils are often found to be in that condition.

Theoretically a large part of the plant food loss from dairy pastures need not occur if the cows are kept continuously on the pasture; but practically the fact remains that it has occurred and is here in the Hay and Pasture Belt, have some badly depleted pasture soils to deal with. The present condition of the typical American dairy pasture soil is well reflected in the results which were secured last year from over 100 pasture fertilization tests scattered over 15 states and the province of Ontario and set forth in Table II.

Table II

Average result of 103 pasture top-dressing tests in 15 states and province of Ontario, 1929.	
Average yield of dry matter in pounds per acre harvested at pasture stage.	
Treatment	Yield
Control	1,051.0
Phosphate and lime	1,392.4
Phosphate and lime	1,548.2
Phosphate and lime	1,850.2
Complete fertilizer and lime	2,501.0

* 65 pounds 16 per cent superphosphate actually used. The figures refer to percentages of nitrogen, phosphate and potash, respectively. The nitrogen was derived from either ammonium sulphate, calcium cyanamide, nitrate of soda or any mixture of them. The phosphate and was derived from superphosphate, usually 16 per cent. The potash was derived from muriate of potash. The lime used was either 2,000 pounds per acre of hydrate or 3,000 pounds per acre of carbonate.

Under any form of agricultural utilization of the soil—even grazing—the nitrogen supply tends toward more or less rapid depletion and can be maintained at a level sufficient for profitable productivity only by a policy of constant replenishment of the supply. Since the time of the Romans one of the standard methods, as far as tillage land

thousands of American pastures which I have examined during the past twenty years might be cited as examples, or better still, the experimental fields at Cockle Park.

In that experiment the average annual live weight increase over a period of twenty years without fertilizer was only about 22 pounds as against 102.5 pounds with phosphate treatment and grazing with sheep alone and 210.5 pounds with phosphate treatment and grazing with both sheep and steers. On the unfertilized plot little or no clover ever grows and the nitrogen deficiency has become acute, while on the phosphate treated plot clover has grown regularly and the nitrogen supply has been fairly well maintained.

Does it follow that phosphatic fertilization will always do this? Not at all, since phosphatic fertilization will not always prove a sufficient treatment to grow such clover as grew at Cockle Park. What does follow, I think, is that any treatment which will grow as good clover as grew there will tend to maintain the nitrogen supply in a comparable manner. Growing such clover wherever it is wanted, however, is a lot easier said than done.

There are certain practical objections to exclusive dependence on legumes to maintain the nitrogen supply of pasture soils as compared with natural or artificial nitrogenous manuring. In the first place it may take several years to establish a really good stand of clover, and several years more for the clover to build up the nitrogen supply. In the second place clover does not, as far as I have observed, ever build the nitrogen supply up to anything like the requirements for maximum yield. In the third place without nitrogenous manuring good grazing is ten days to two weeks later in the spring despite good clover, and of shorter duration than with nitrogenous manuring.

It has been known for years, ever since farmers first began to use fertilizer, in fact, that nitrogen is the growth element and can be depended on,



A well-grazed paddock on a farm in Lower Bavaria

barring severe drouth, to increase the yield of grass almost in direct proportion to the amount used; but only within the past decade have we acquired sufficient knowledge and skill to use it successfully on pasture land. The fundamental facts underlying the successful use of nitrogen on pasture land are:

1. The soil must be physically well adapted to the growth of pasture herbage, particularly with respect to moisture supply.
2. There must be an adequate foundation for plant growth with respect to the mineral elements, either naturally present or artificially supplied.
3. There must be a good sod of responsive grasses.*
4. The pasture must be grazed evenly and moderately close as soon as the grass is in the right stage to graze—say four to eight inches tall—and then receive another application of nitrogen and be allowed to recuperate for three to five weeks before grazing again.
5. From the economic standpoint the extra grass must be produced when it is most needed insofar as possible instead of only at a period of normal greatest vegetative growth, at which time it is of less value.

All of which, like standing an egg on end, is fairly easy to do once you know the trick. I shall try to explain the trick.

During the World War there was a rather acute shortage of high protein feed in Germany. Dr. H. Warmbold, then at Hohenheim, attempted to solve the problem by fertilizing pasture grass liberally with nitrogen, thus making the grass into a high protein feed. It was found to be easily (Con. on page 21)



Mr. Hans Hansen, Grundhof, Schleswig-Holstein, with his herd in his newly fertilized grass.

(* This statement is so often misconstrued as to require a little further explanation. It certainly is a fact that there is about as much difference in yielding capacity between the better grasses and inferior grasses and weeds as between pure-bred and scrub cows and that maximum results will never be secured by fertilizing a really poor sod; but it does not follow that nitrogen should never be used on poor sod. Very often indeed it is the very thing most needed to transform the poor sod into a good one.

PENNSYLVANIA FARMER

Published Weekly
Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
T. D. HARMAN, Vice-Pres.
GEORGE M. SLOCUM, Vice-Pres.
NEFF LAING, Manager

EDITORIAL STAFF
E. S. BAYARD, Editor-in-Chief
C. L. WHITE, Editor
MILES HORST, Field Editor
M. C. GILPIN, Editor
G. W. HARRIS, Field Editor

Editorial Offices: PITTSBURGH, HARRISBURG, PHILADELPHIA

Contributing Editors: R. P. Kester, Alta Agee, L. W. Lighty, W. D. Zion,
R. U. Bismarck, J. F. Shibley, F. L. Bentley, J. G. Lipman,
R. W. Fletcher, H. C. Knael, A. A. Berland,
R. L. Scharringhausen, Gilbert S. Watts,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square line measurement, or \$14.00 per inch each insertion. Minimum space 5 lines. Special rates on application for livestock and classified advertising. No deceptive, immoral or swindling advertisement inserted at any price.

Member Agricultural Publishers' Association,
Audit Bureau of Circulations.

Volume 103, No. 24

Established 1877

FASHION NOTE

ACCORDING to market reports buyers in Australia, in Britain and in this country are taking fine wools more freely than other grades. Evidently this is due to the current fashion for broadcloths in women's coats and suits. Some expansion of fashion to fabrics made of other grades of wool would be mighty helpful to the sheep industry.

CHEAP EGGS

THE egg market is in need of all the help the campaigners for larger consumption can give it. Last week standard refrigerator eggs for January delivery sold as low as 16 1/4c per dozen at Chicago, the lowest since future trading was established. The fall has been favorable to egg production and this came at a time of heavy storage stocks. Fortunately there is not likely to be any attempt to "stabilize" this market by piling up big stocks. The eggs will be used at some price and be out of the way of another crop.

AN ERRONEOUS THEORY

THE Kansas City Star concludes that "the whole theory of stabilization is erroneous" and says: "If the surplus wheat in the United States and Canada had been marketed in a normal manner, moved into channels where it would have been consumed before the 1930 harvest started, the present low levels would not have been recorded. The Star has repeatedly called attention to the failure of stabilization methods in the handling of coffee, rubber, sugar, raisins, tobacco and other products. Wheat and cotton may now be added to the list of commodities that must be sold as they are produced if those who grow them are to reap the greatest profit through a series of years."

FERTILIZER FEARS

THE fertilizer industry is concerned about the effects of this year's dry weather on next year's business. The manufacturers are not worried about the amount of fertilizer to be used but about the quality they fear many farmers will choose. In an effort to lower cost of production it is only natural for producers to buy their supplies as cheap as possible, but we do not believe that farmers in this territory, who are experienced users of commercial fertilizer, will deceive themselves by confining price per ton with price per pound of plant food. We cannot fool a cow with sawdust or fool plant roots with sand or any

PENNSYLVANIA FARMER

December 13, 1930

other filler. The economy of high-analysis fertilizer has been proved by experience. Not the name but the analysis on the bag is the safe basis on which to figure cost of fertilizer, and our farmers are going to continue to buy on that principle.

OFFICIAL TALKIES

THE Director of Extension Service in the United States Department of Agriculture announces that no more silent story pictures are being made for the use of extension workers, that henceforth talking motion pictures will be provided. This ought to improve the speaking of sundry department orators as well as give the audiences more information about the pictures. Maybe it will tend to relieve some of us amateur speakers who now have so many requests to talk at various agricultural assemblies. For the Department's specialists in speaking ought to do a better job than the amateurs, much better than those who are more accustomed to push the pencil than to talk audiences to sleep.

DROUTH SHIPMENTS

WITH November expired the special freight rates granted by the railroads on feeds shipped into drouth areas and on livestock shipped out of such areas. It is significant that the movement of feeds was much greater than the movement of livestock under this arrangement. The totals are not yet available, but a few weeks ago the railroads expected that shipments under drouth permits would exceed 60,000 carloads. When the final figures are available we shall see that the railroads have contributed a substantial amount, and more than any other industry, to the relief of regions and individuals suffering by prolonged drouth. Let this be remembered to their credit, likewise the fact that they did it at a time when their revenues were shrinking. This is an instance of practical co-operation brought about by official agencies—the Department of Agriculture and the Interstate Commerce Commission, which should have credit for prompt action in an emergency.

THE CANADIAN POOL

IN recent years several gentlemen whose ideas about the control of markets were not in accord with ours have written citing the Canadian Wheat Pool as an example of success in regulating the price. We have suggested, in each case, that they await the end of the Canadian Pool's experiment instead of judging it too early in its history. Now we desire to call their attention to the condition of the Pool after its futile and costly effort to control the price of wheat. It is virtually in charge of the bankers who loaned it the money it advanced to growers of the 1929 crop, and the bankers will supervise the disposition of its holdings. Whether the Pool survives in its present form or whether it is split into regional associations as before its organization, we are pretty certain that the future Canadian policy will be to market wheat and not to attempt to control the price. The old Canadian cooperatives were successful marketers of the wheat of their members and what has been done in the past can be done in the future.

ONE LESSON

IT is not possible to mention all of the lessons which the public could learn at the International Livestock Exposition last week. One of them is taught year after year—the great and too often ignored lesson of the value of blood. In the thirty years of the International's history blood has always won the prizes, always commanded the high price.

es. Right by the show is the open market whereon the same lesson is taught every business day in the year. And yet that market shows too many failures to heed the lesson taught every day about the cheapest thing in the world considering its value—blood.

A calf born August 1, 1929, was the grand champion of the steer show. A carload of last year's calves won the highest honors in the greatest show of commercial cattle ever assembled. March pigs were the champions of the commercial hog show and a spring pig in the 200-240 pound class was the grand champion. A lamb was the ovine champion and a load of lambs topped the commercial show, even the yearling being practically out of the market of today. All due to blood and good feeding. Some contrasts were presented—an old-fashioned steer of 2,200 pounds and a carload averaging 2,090 pounds, for example. But the market favors younger animals and handier weights—and the market in this respect is all in favor of economy of production and to the advantage of the producer. For instance 92 carloads of yearling steers averaged \$15.56 per cwt. and the 2,090-pound steers brought \$9 per cwt. Not alone in livestock, nor for producers only, were the lessons of the International. Consumers were shown things they ought to know—but we must not attempt to discuss them here.

THE FIRST REPORT

THE first annual report of the Federal Farm Board appeared last week. It states the "general attitude" of the Board, its "general policies," a general survey of its field of work and a general description of its activities, with numerous other general statements and observations. Nowhere does it specify the amounts of the commodities bought or carried by the organizations operating under its supervision. Nowhere does it give the names of the organizations to which loans have been made, though it does give a summary of such loans. This shows that its amount to \$242,659,476.13, of which \$105,000,000 is to stabilization corporations. The balance of such loans now outstanding, however, is \$148,616,194.05, some of them having been repaid and others not yet advanced. It may be that we should not expect the Board to report on such things as the accumulations of wheat or cotton, but the public interest in these things would justify the presentation of them even if this is not technically the place for it.

In reporting its experience in attempting to stabilize markets the Board recites at some length the difficulties encountered, which are evidently greater than it expected. But it is not yet ready to abandon the fallacious theory of stabilization, for it says: "There is a field for stabilization measures—just how large a field the Board is not in position to determine." In the control of production the Board is evidently more hopeful, for it says: "The Board considers the steps taken during the last year as constituting only a beginning in this essential field of its activities in the prevention and control of agricultural surpluses." From which we may expect more if not better things in the future.

A few interesting facts crop out in the annual report. For instance, "Charges for carrying wheat are cumulative at about 1 1/2 cents per bushel per month." From which we assume that the wheat speculation is costing about \$1,500,000 per month in carrying charges alone. The cost of carrying cotton is not stated nor is any intimation given as to the disposal of the vast stocks of it and of wheat now held, which have "a somewhat depressing effect" on prices. "Somewhat" is good. The Board has 223 employees and its payroll amounts to \$499,333. Its total outlay the first year was \$784,065—but its actual cost to agriculture and to the country's business is something that can't be computed.

December 13, 1930

AN extremely dry and unfavorable season combined with low prices received for New Jersey fruits and vegetables did not shatter the optimism and spirit of enthusiasm of the growers attending the fifty-sixth annual convention of the New Jersey State Horticultural Society at Atlantic City on December 3, 4 and 5. This annual convention of New Jersey horticulturists is looked to with interest for it always offers an interesting program which brings to light the newest developments in production and marketing of the past season. Years ago the Horticultural Society leaders learned the essentials necessary for a successful annual meeting, that was that they must offer their members constructive information by which they could improve their own farm practices during the following season. They are still keeping abreast with the times.

BETTER times for the budding peach and apple trees which point to good crops in 1931, is the opinion of Prof. A. J. Farley, secretary of the Society.

He reported that fruit growers, through the more general adoption last summer of uniform grades promulgated by federal and state departments of agriculture, have opened new and wider outlets for their products. Instead of depending largely on the New York and Philadelphia markets growers have found during the past season that by careful grading they can profitably sell in the markets of the South and Mid-West, and also in the export market.

W. W. OLEY, chief of the New Jersey Bureau of Markets, advocated the employment of inspectors for the auction markets who would certify that the products offered for sale measured up to the requirements of the grade under which they are packed. This procedure, which has been successfully followed in the auction markets of southern states, facilitates trading and provides buyers with a guarantee that the products sold actually measure up to grade requirements.

In discussing the results of auction markets for fruits and vegetables, Mr. Oley stated that the farmers using the Cedarville and Rosenhayn markets in Cumberland county, the two oldest markets in the state, this year received \$80,000 more than the average price paid for similar shipments of the same crops, on the same days, in the New York market. The gain to the farmers, on the basis of total volume of produce handled, was about 20 per cent.

THREE insect pests which are expected to offer additional worries to New Jersey vegetable growers during the coming year are the Harlequin cabbage bug, the eggplant lace bug and the pepper or tobacco flea beetle is some discouraging information given by R. C. Burdette, associate entomologist at the Experiment Station.

No adequate control measure can be given for the brilliantly-colored red and black Harlequin cabbage bug, he said. Strong contact sprays and dusts kill many of these bugs, but not enough to constitute a satisfactory control. The destruction of the adults in fall and in spring as they come out of hibernation and before they begin egg laying helps in checking this pest. This insect is not new to the state, since it did considerable damage in 1902 and in 1908, but both infestations were checked by adverse weather conditions.

Thorough use of contact sprays will control the eggplant lace bug which was found in the Swedesboro area of Gloucester county in 1928 and again last summer.

Tobacco flea beetles, insects rarely seen in New Jersey, killed 85 per cent of the young peppers in some of the fields in the vicinity of Norma, Cumberland county, where they were found in large numbers this summer. Bordeaux mixture with calcium arsenate has been used successfully in controlling this insect.

COSTS of farm operations are always interesting and some of those given by Dr. H. C. McLean at the Experiment Station in the use of fruit washing machines—the "laundering" practice is becoming common in New Jersey—may prove helpful to others. Stringent requirements of the export market in reference to spray residue has necessitated the washing of many New Jersey apples.

One grower who installed a washer so that his fruit would meet export requirements received 30 cents more a bushel on 8,000 bushels of apples

PENNSYLVANIA FARMER

(537) 7

New Jersey Farm Comment

By G. W. HARRIS

shipped. His gain, after paying \$200 for a home-made washer and its additional operating expense, was \$2,050. Another grower using a manufactured washing machine which cost him \$1,200 made a net gain of \$1,500 on his crop after paying for the washer and its operating costs.

"This modern method of cleaning fruit costs the grower from one to three cents a bushel, depending on the number of bushels cleaned and the type of washer used."

ROBERT P. HULSART, a well-known fruit grower near Manasquan who has served as vice-president of the State Horticultural Society during the past two years, was elected president of that organization for the coming year.

Other officers elected were John Thornborrow of Millville, vice-president; and Prof. A. J. Farley of New Brunswick, who was reelected secretary-treasurer.

Master Farmers of 1930

FOUR New Jersey farmers will receive the Master Farmer Award next week in recognition of outstanding merit in farming and rural citizenship. The presentation will be made at a dinner given in their honor at New Brunswick on December 17th by the Pennsylvania Farmer and the American Agriculturist, joint sponsors of the Master Farmer movement in New Jersey. The four men chosen to receive the award for 1930 are:

W. B. Schober, Monroeville, Gloucester County
John H. Weed, Vineland, Cumberland County
W. S. Hibler, Greendell, Sussex County
George Smith and Lawrence J. Smith, South River, Middlesex County

I. Harry Hutchinson of Jobstown was elected to serve as the Society's delegate to the State Board of Agriculture for a three-year term.

E. A. Mechling of Moorestown, the retiring president, and William K. Hookstra of Beverly, were elected to the executive committee for three-year terms. Richard Scoskie of Ridgewood also was elected to the executive committee to serve the unexpired term of John Thornborrow.

A PURSE of \$250 was presented to D. H. Agans, Master of the New Jersey State Grange, in appreciation of ten years of service to the New Jersey State Grange at their convention at Atlantic City, December 1, 2, 3 and 4. "Dave," as he is familiarly known by his many friends, was re-elected to serve his eleventh year in this office.

Other officers for the coming year are: Howard B. Hancock, overseer; Leonard H. Norcross, lecturer; Howard B. Willis, steward; John V. D. Forman, assistant steward; Rev. D. D. Russell, chaplain; William Rittenhouse, treasurer; and James Kirby, secretary.

William Blackwell and Dr. W. H. Whitton were elected to serve on the executive committee.

A NORTH JERSEY farmer planted three acres of Russet potatoes this season and many of them are being trucked to Philadelphia. His stock is fancy and is outselling the best Pennsylvania stock offered. Most of the Pennsylvania potatoes that you see are badly misshapen and small, reflecting the poor growing conditions.

W. C. LYNN of the State Department of Agriculture reported that 40 orchardists found this season that additional profits could be obtained by exporting their fruit to Europe and South America.

"Nearly half of the apples inspected this summer and fall by the Bureau of Markets, or more than 85,000 bushels, were exported to European and South American markets," he explained.

"Of the approximately 185,000 bushels of apples inspected in the state this year, only three per cent failed to meet the requirements of the grade packed."

The extremely poor crop of export apples in the Shenandoah-Cumberland valley of Virginia this year turned buyers to New Jersey for export shipments. Many of the New Jersey growers who for

the first time this season have exported apples are very optimistic in thinking that they can hold this new marketing trade during 1931. It is to be hoped that by packing a high quality export apple they will be able to hold the market which has developed this year, but it would seem that if Virginia has a normal crop next year the New Jersey growers will find difficulty in maintaining this trade.

HENRY WALTON of Moorestown High School was awarded sweepstakes prize at the State Grange Convention at Atlantic City for the best vocational project in the state during the past year. The Grange in promoting better agriculture each year awards a total of \$100 to boys who have done outstanding work in their vocational farm field.

Last summer Henry grew 17 acres of tomatoes which netted him \$518.52. In telling of his project he said,

"During the winter of 1929-1930, I was considering my next year's project. I live on a 160-acre farm but nothing on the home farm quite satisfied my desires so I considered renting a semi-deserted farm nearby. After consulting the owner I found a 20-acre tract could be rented for \$100.

"My father has a greenhouse in which he agreed to grow me 60,000 tomato plants. That spring I procured the tractor and plow for \$100 and plowed 17 acres of the 20. The rest of the tract was usually quite wet and marshy. Therefore, I thought it a loss of time, plants and money to try to use this area.

"I prepared the soil and made up the rows with the assistance of the hired men and my father. I got the plants out. I attended to the cultivation and care of the project.

"I contracted for the sale of the entire crop at \$20 to \$24 per ton depending on time of delivery and conditions.

"The farm gang of Italians did all the harvesting which was supervised by myself and the Italian foreman."

Other boys to whom awards were given are: Earl Losey, Sussex; John Keenan, Lambertville; Milton Jager, Newton; Samuel Stellatella, New Brunswick; Franklyn Smick, Salem; John O'Brien, Madison; Franklyn Wooden, Lambertville; and Alexander Allamp, Glassboro.

"THE best form of farm relief, and one which the growers themselves could provide, would be to reduce their costs of production," Prof. A. G. Waller told the vegetable growers.

"We found on ten farms, for example, that the costs of growing 100 ears of sweet corn ranged from \$1.58 to \$4.01. The costs of growing market tomatoes on 22 farms varied from 21 to 94 cents a crate, and on 13 farms the production costs on spring spinach ranged from 28 cents to \$1.43 a crate," he stated.

NEW JERSEY'S 1930 apple crop showed fewer blemishes as the result of attacks by insects and diseases than any apple crop produced in the state within the past five years, is the report of A. J. Farley.

GOVERNMENT scientists are criticised by many for hedging their statements to such an extent that they do not mean anything to the average reader. The chief of the Weather Bureau made a statement that is definite enough for any one. He said, "The central and eastern portions of the country have now passed through the most severe drouth in the climatological history of the United States." Further along in his report it states, "Not a single state east of the Rocky Mountains had as much as normal precipitation for this period of the three principal growing months, and some half dozen states had less than half the normal."

What causes such abnormal conditions? The Weather Bureau can't answer that one, but it states that the drouth of 1930 is best explained as a prolonged stagnation of the air over nearly the whole continental extent of the United States, but the experts are unable to give any specific causes for the stagnation.

PEACH yellows, a serious disease of that crop, is becoming increasingly severe throughout the state, according to Dr. W. H. Martin, plant pathologist at the Experiment Station.

"In some North Jersey orchards 40 per cent of the peach trees are infected with this disease, and unless such trees are immediately removed the infection will spread throughout the orchard."

International Livestock Exposition

THE exhibits at the International Livestock Exposition last week would not lead any observer to suspect that drouth had prevailed over wide areas of our country this year, creating a shortage of our greatest feed crop and problems compelling some action by Congress. For there was no evidence of a bad season in the exhibits, though some reflection of it in the lesser attendance of farmers and stockmen. The great array of fat stock was never before equaled in numbers and quality. The exhibits of grain and forage crops showed no signs of lack of moisture. The educational exhibits were as numerous as ever and they continue to improve in the method whereby they teach the fundamental lessons of modern agriculture.

Herefords in California

There was one conspicuous weak spot in the show of pure-bred livestock—the more conspicuous because notable for its excellence in recent years. That was due to the absence of the leading Hereford herds of the country, which forsook the International and participated in a show at Los Angeles, Cal. This movement, led by an official or officials of the Hereford Association, was generally regarded as a protest against the International's rule prohibiting the "doctoring" of show animals by cutting and filling. By this is meant the use of the knife to remove "ties" in the back or superfluous fat, and the injection of oil or fat into weak spots to conceal deficiencies or secure desired smoothness. If this action by the Hereford breeders was such a protest it was a very ill-advised one, for it left an impression which is neither favorable to the protesting breeders nor good for the breed. A protest which leads to such assumptions can do nothing but harm, and the Hereford men should promptly disavow it and then demonstrate their willingness to show under the same conditions as apply to all breeds. The International's rule is a proper one and all should observe it.

Corn Better than Expected

The views of the visitors to the International never before presented such variety. This not merely as to the problems confronting agriculture but as to agricultural conditions. The corn crop has proved to be better than was expected earlier. Many corn growers have been happily surprised at the quantity of corn they got and all are pleased with its quality. There is general and genuine wonder that so much corn could have been grown with so little moisture—or none at all after the crop was well started. Farmers have confidence in corn prices and expect a higher market later for wheat as well as corn.

Kansas Feeds Wheat

Inquiries as to the feeding of wheat developed



Jimmy, this year's grand champion steer, was a pure-bred Angus shown by J. F. McKenny of King City, Missouri. He sold at \$2.50 a pound and weighed 1,080 pounds.

a wide range of opinions. Some feeders have bought wheat to feed to cattle. One Wyoming feeder is getting it at 48 cents per bushel, his neighboring growers being far from shipping facilities. Another reported the purchase of a couple of carloads at 68 cents per bushel for mixing with oats and with corn bought at several cents above wheat prices. Tales were told of liberal purchases of wheat by feeders, but the general impression is that the bulk of the wheat which goes into the feed lot will be used by those who grow it. How much that will be is the subject of much guessing. Kansas who ought to know something about what is doing in their own state think that 50,000,000 bushels is a highly conservative estimate of the amount to be fed there. Comparatively little was heard about the Federal Farm Board's big wheat deal except some speculation as to the disposal of its accumulations. Winter wheat acreage appears to be well up to last year, but there is some talk about raising more barley and flax and less wheat. Feeders who have been able to get barley to take the place of corn report excellent results. The value of oats is also better appreciated than before so much was used in feeding cattle and lambs.

Views of Cattlemen

Cattle feeders were not so numerous as in other years, but representatives of all Corn Belt states reported a shortage of cattle on feed. The difference, however, is not so great as was expected earlier, as a good many feed-lots have been stock-

Cheaper than Cattle

It has been a great fall for the hog feeder as far as weather is concerned. Gains have been good and the hogs have proved satisfactory slaughterers. The futures market shows little sign of any expectation of radical changes in price, but there is no evidence of a large crop or some evidence that it will be marketed earlier than usual. Stocks of lard and meats are not burdened, but the pocket-books of consumers are full and the future of all livestock prices must depend in large measure on the ability of the consumer to pay. It is unusual for lambs and both to sell below cattle at a time of depression and prices are likely to be leveled some time. Lamb feeding is apparently less than in recent years in the Corn Belt, but low prices of sheep do not appear to be creating any panic among growers. They are not rushing out of the business in former depressions, possibly because there is nothing else to which they may turn with a better prospect of success.

Changes on the Way

Changes are manifest in industries related to agriculture as well as in agriculture itself. Marketing has so shifted that a large percentage of the country's livestock goes directly to the packing plant instead of to the open market. The factory system and refrigeration, which were responsible for the centralization of the slaughtering industry, are now an influence in the opposite direction. The tendency is toward decentralization, with the factory system in use everywhere and refrigeration so developed that smaller plants can lay down their products at distant points as well as the larger ones and often cheaper. Quality of freezing of meats is growing in volume and revolution in meat distribution is not so far ahead of us.

The Greatest Carlot Show

The carlot show of fat cattle brought out 2 carloads, 3,915 head—the largest number on record. The sifting committee left 125 carloads in the show, and clearly they were the best 250 pure-bred Southdown lamb bred in the country, shown by Purdue, a high-grade Southdown by the same sire being shown by the same sire. Both were mighty good and a worthy champion.



Above is shown the winning exhibit in the class for best five Belgian stallions owned by one exhibitor. They were shown by the Holbert Horse Importing Company of Greeley, Iowa.

competition was mainly between agricultural colleges. The only feeder to compete in the Chester White class was Albert H. Stuart of New Hall, Ia., and his winner of the 200-240-pound class was made Champion of the breed and of the show. No other championship escaped the agricultural colleges.

Sales of Champions

The grand champion steer brought \$2.50 a pound when sold at auction. He weighed 1,080 pounds, thus totaling \$2,700. The Breakers Hotel, Atlantic City, was the buyer. Arbogast & Bastian of Allentown, Pa., for the third successive year bought the Grand Champion carload. The price this year was \$31 per cwt., compared with \$44 last year. The record price was \$55, paid in 1926. This year's champions averaged 970 pounds, making them bring a little over \$300 a head. Swift & Co. bought the champion carload of lambs, paying \$21 for them. The record was \$68 paid in 1926. Champion load of hogs sold at \$11.25.

Railroads were good buyers in the carlot cattle auctions. Many hotels were also represented in the buying. Chain stores, restaurants and provisioners were again in the market. A new consumer outlet for prize beef appeared in purchases for sev-

Fat Cattle Awards

SHORTHORN STEERS

Judge.—Frank Scofield, Hillsboro, Texas. Steer, calved Jan. 1 to April 30, 1929 (25 shown): 1. Fred H. Deacon, Unionville, Ont., on Tam O'Glenburn; 2. Sni-A-Bar Farms, Grain Valley, Mo., on Sni-A-Bar Superb; 3. Oklahoma A. & M. College, Stillwater, Okla., on Count Claret; 4. Beulah Larson, Harlan, Iowa, on Amethyst Diamond; 5. Iowa State College, on Mar Rosewood. Steer, calved May 1 to Sept. 30, 1929 (25 shown): 1. Iowa State College, on Max; 2. Iowa State College, on Supreme Dreadnaught; 3. Roy Lewis Cruzen, Oskaloosa, Iowa, on J. H.; 4. Orin Baumgartner, Apple River, Ill., on Duke; 5. Oklahoma A. & M. College, Stillwater, Okla., on College Ace. Steer, calved Oct. 1 to Dec. 31, 1929 (25 shown): 1. Sni-A-Bar Farms, on Sni-A-Bar Scottie; 2. University of Illinois, on Illini Ideal; 3. Michigan State College, on Rich Prince; 4. Iowa State College, on College Seal; 5. J. Owen McCord, Palos Park, Ill., on Bridgebank Buddie.

Steer, calved since Jan. 1, 1930 (16 shown): 1. University of Illinois, on Illini Jovial; 2. Purdue University, on Gipsy's Ruler; 3. Michigan State College, on Advance; 4. West Virginia University, Morgantown, W. Va., on College Consul 2nd; 5. Beulah Larson, Harlan, Iowa, on Cumberland Memor.

Champion Shorthorn steer: Fred H. Deacon, on Tam O'Glenburn. Reserve champion: Iowa State College, on Max.

HEREFORD STEERS

Judge.—Walter Biggar, Delbeattie, Scotland. Steers, calved between Jan. 1 and April 30, 1929 (30 shown): 1. Oklahoma A. & M. College, on Hazford Optimus 67th; 2. Iowa State College, on Col Repeater; 3. Agnes Marie Fassett, Reynolds, Ill., on Sandy; 4. Purdue University, on Beverly; 5. Hilldale Farm, Muscatine, Iowa, on Coronet Incom 22nd.

Steers, calved between May 1 and Sept. 30, 1929 (35 shown): 1. Oklahoma A. & M. College, on Dale 2nd; 2. Purdue University, on Wyoming Mixer; 3. Beryl Everest, Clemens, Iowa, on Tony; 4. Iowa State College, on College Repeater; 5. Purdue University, on Don Mixer. Steer, calved between Oct. 1 and Dec. 31, 1929 (23 shown): 1. Hilldale Farm, Muscatine, Iowa, on Muscatine 11th; 2. Oklahoma A. & M. College, on College Rupert; 3. Oklahoma A. & M. College, on College Inheritor 2nd; 4. Louis Osterhoff, Lafayette, Ind., on Shadeland Mixer; 5. The Saint Amour Co., Mortonville, Pa., on Honor's Louis.

Steer, calved since Jan. 1, 1930 (12 shown): 1. Hilldale Farm, Muscatine, Iowa, on Muscatine 14th; 2. The St. Amour Co., on Keystone Avalanche; 3. The St. Amour Co., on Keystone Mischief; 4. Purdue University, on Mark Mixer; 5. West Virginia University, on Lawners Choice 2nd.

Champion Hereford steer: Oklahoma A. & M. College on Dale 2nd. Reserve champion: Hilldale Farm on Muscatine 11th.

BERDEEN-ANGUS STEERS

Judge.—Walter Biggar, Delbeattie, Scotland. Steer, calved Jan. 1 to April 30, 1929 (40 shown): 1. Miller & Kemp, Olin, Iowa, on Blackcap Model; 2. Iowa State College, on Model Type; 3. Iowa State College, on Fair; 4. Iowa State College, on Blackcap Model; 5. Briarcliff Farms, Inc., on Briarcliff Andy.

Steer, calved May 1 to Sept. 30, 1929 (81 shown): 1. J. P. McKenny, on Jimmy; 2. Briarcliff Farms, Inc., on Briarcliff Amos; 3. Iowa State College, on Estons Model; 4. Iowa State College, on Blackber; 5. Edwin Brown, Aledo, Ill., on Enlate. Steer, calved Oct. 1 to Dec. 31, 1929 (37 shown): 1. University of Minnesota, on Alfred; 2. Iowa State College, on Just Rite; 3. Iowa State College, on Estons Model; 4. University of Minnesota, on Elfin; 5. University of Illinois, on Black Nugget.

Steer, calved Oct. 1 to Dec. 31, 1929 (37 shown): 1. University of Kentucky, on Kentucky Jock; 2. Robert Collins, Liscomb, Iowa, on Bud; 3. Purdue University, on Black Evictor; 4. E. G. Little, Dresden, Ohio, on Black Gay; 5. Congdon & Battles, Yakima, Wash., on Barbarian of Rosemere 3rd.

Champion Angus steer: J. P. McKenny, King City, Mo., on Jimmy. Reserve champion: Miller & Kemp, Olin, Iowa, on Blackcap Model.

(Continued on page 19)

eral steamship lines. The Red Star, the Cosulich and the Hamburg American lines took show beef to serve on their ships.

Horses Popular

The draft horse breeding industry was well represented in both numbers and quality. Percherons and Belgians predominated in number, with Clydesdales, Shires and Suffolks fewer but imposing in quality. Interest in good horses shows no decline. In fact if one were to judge from the size of the crowd which watched the judging and the enthusiasm displayed the horse is the most popular farm animal.

Young Folks

Fourteen hundred 4-H Club boys and girls from 43 states and one Canadian province were present for the ninth annual National 4-H Club Congress.

These young farm folks staged a show of record proportions. They entered some 200 calves, 18 pens of lambs and ten barrows. The results of their judging contest are given elsewhere in this paper.

The champion steer in the junior feeding division was shown by Sarah Ann Tolan of Farmington, Ill. Phil Robinson, Evansville, Wis., showed the champion pen of fat lambs, while Gerald Simonin, Brook, Ind., had the best fat barrow. First prize for best exhibit on window treatment for the farm home went to Erma Bamesberger, of Hampton, Neb., and best children's garment exhibit was won by Dorothy Hopkins, Stillwater, Okla.

Health Champions

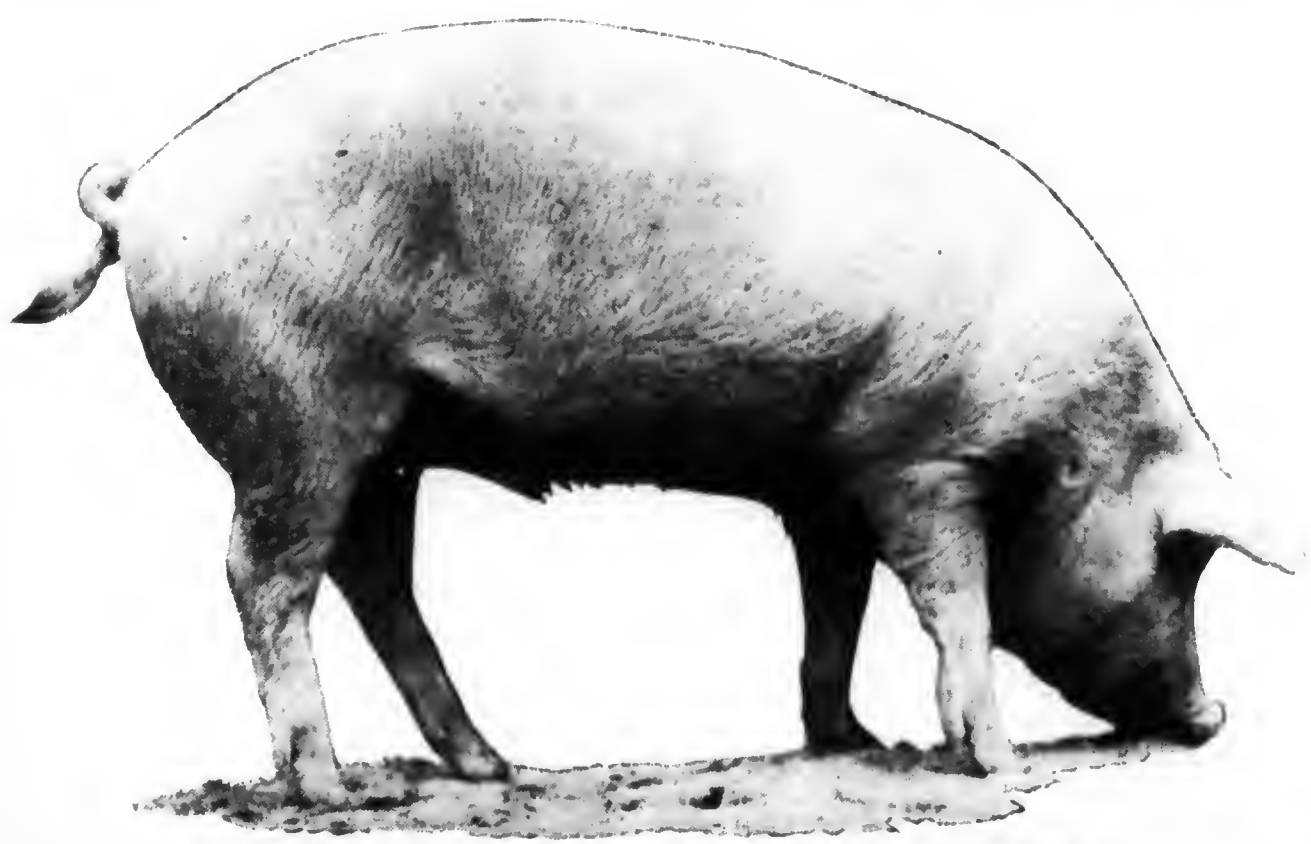
Marian E. Syndergaard, 15 years old, of Grundy county, Iowa, and William Bodenhamer, 20, of Johnson county, Missouri, were chosen as the 1930 national health champions. Miss Syndergaard scored 99.7, the highest mark ever made in a similar contest, and Bodenhamer scored 98.7, after careful examinations by a corps of nurses, dentists and physicians at the McCormick Memorial Institute where the contestants were examined. Twenty girls and 15 boys, all state champions, competed in the national competition.

The boys and girls in the contest this year were the highest scoring group ever handled in a national health event, physicians stated, and several had to be examined several times, so close were the scores. Dr. Caroline Hedger, who has been connected with the contest since it was started, pointed out that the influence of the national contest has gone down to remote communities, as fewer entrants are showing up with defects in teeth, feet, posture and similar items, previously the cause of many imperfect scores. Only three of the entire group of 35 had not been vaccinated, indicating the general interest in disease prevention. A few years ago, only a few of the entrants had been vaccinated.

A Corn Queen

Anna Belle Holden, Williamsburg, Ia., was the junior corn "King" of the 1930 show at the International Livestock Exposition, her ten-ear sample of Reid's Yellow Dent, of medium rough type, being selected from among 85 ten-ear samples exhibited by 4-H Club members and vocational agricultural students from the eight regions of the Corn Belt.

Oklahoma, Arkansas, Nebraska and Illinois 4-H girls emerged as the individual winners in the home economics judging contest. Florence Drossel, Guthrie county, Oklahoma, and Dorothy Butler, Arkansas, tied for the honors in judging canned goods. Helen Cole, Cass county, Nebraska, was the best judge of room improvement materials; Helen Smaha, Milligan county, Nebraska, made the high score in judging bakery products, and Marjorie Pepper, Rockford, Ill., was the best judge of clothing.



Grand champion barrow, shown by A. H. Stewart, Newhall, Iowa.

John Imberlay, Trustee

By Homer Green

Copyright, 1930, by Perry Mason Company.
Boston, Mass.

SYNOPSIS

There is a deep mystery about the trust under which John Imberlay, president of the Citizens' Bank of Brierly, is acting as trustee. The creation and conditions of the trust and the beneficiaries are matters of which Mr. Imberlay alone appears to have any knowledge.

Mrs. Leighton, a widow, and her lame son, Robert, have just left Mr. Imberlay's office after an unsuccessful attempt to have an extension of time on the long over-due mortgage on the farm. Mr. Imberlay has flatly refused their request but later seems interested in Robert and also in Rafe Orchard's neighboring farm and makes inquiries concerning both farms. Robert and his mother have tried without success to borrow money to save their home. A few days later they receive a letter from John Imberlay offering Robert a position in the bank and granting an extension of time on the mortgage.

A run-away gives Rafe Orchard a chance to play hero to John Imberlay's daughter and niece, who strike up a warm acquaintanceship with June Orchard. At the bank, where Robert is working on the mysterious trust fund, he finds a paper which states that Mr. Imberlay is handling the trust fund for Rafe Orchard. It amounts to many thousands of dollars and knowing the poor circumstances of Rafe and his daughter, Robert is perplexed, although he says nothing of his discovery to anyone. Rafe Orchard is very ill and in need of money.

"Yes, sir. I understand."

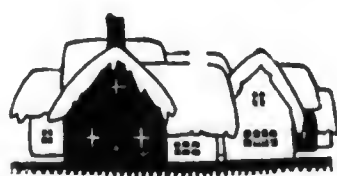
Robert went back to his tasks with a heart like lead, while John Imberlay, with his head resting in his hand, sat for many minutes in deep thought. He straightened himself up finally, sat erect in his chair, and set his lips firmly together, as was his wont when he had made up his mind concerning a vexed question.

And he had made up his mind concerning this one. He had decided that he could not afford, at this late day, to right a wrong committed by him nearly a quarter of a century before, if by so doing he must make explanations that would involve his honor and integrity, and place it in the power of Rafe Orchard to destroy his character and business at a blow. If justice was to be done to Rafe Orchard, it must be after John Imberlay's death, when no explanation, other than that given in the declaration of trust, would be necessary.

But this decision did not quiet his conscience or give him peace of mind. For two and twenty years this burden had rested on him—very lightly at times. In the contemplation of his great business successes and of his splendid reputation in his city and his state, he had now and then almost forgotten its existence.

But with the illness of Rafe Orchard and his

The Cheerful Plowman



NOT SO BAD

WHEN the snow piles deep by the kitchen door and we tramp it in on the kitchen floor, when the storm door squeaks with a mournful sound and the cart wheels squeal as they turn around, when the soap-suds snap as they strike the ice, when a wail is made by the clothes line splice, when the cat and dog, in a trice at last, curl side by side and forget the past—'tis then we say, "These winter days, when the sun-dogs steal all the sun's warm rays, are sad indeed." Yet, in spring, 'd'ad, we say, "Oh, shucks, it was not so bad."

When the pump is froze with a frosty core and the low built coops have been drifted over, when the horses' breath ascends in steam to make hoar-frost on the ceiling's beam, when the kindling pile by the willow row has as much of soiled and drifted snow as it has of wood, when the rooster stalks a stiff old man in his house-fast walks, ah, then we say, "How hard the ways of us farmer folks in the winter days." But when 'tis spring we say, "B'dad, well after all it was not so bad."

When the smoke curls high in the thin, thin air from farmers' chimneys everywhere, when a horse's neigh or a hammer's sound is heard for miles and miles around, when the cows hulk up as they strive to drink from the hole we've chopped in the trough's cold brack; when the earth is white and the sky is gray, when the sun is red through the short-lived day, 'tis then we moan, "Oh, the dreary days that we all endure while the winter stays." But anon 'tis spring, and we say, "B'dad, well after all, it was not so bad."

J. E. T.

anxiety lest the man should die before he could be done him, the whole unhappy situation came back acutely into his mind, and do what would, he could not rid himself of his constant thought of it. His trouble manifested itself in appearance, his conversation, his manner. The ployes of the bank noticed it, and commented it among themselves. Even Robert saw that employer, like himself, was laboring under strain, and he alone, among them all, divined the true cause. He felt that it must be in some manner due to his relations with Rafe Orchard and trust.

Toward the last of May the state bank examiner came to make his periodical examination of the affairs of the bank. Books, papers, cash, statements were thoroughly inspected. It was an occasion when John Imberlay was more than a little among his employees.

But he went about the bank with a restraint of manner, a taciturnity of speech and an air of countenance such as his employees had never before seen. Plainly it was not due to any wrong in the business of the bank. The accounts were never in better shape, the accounts checked up more exactly, the examiner had expressed himself as being so well satisfied with the affairs of the institution as today.

Robert thought he knew the cause of his employer's anxiety. And as he looked, time after time, into the haggard and pallid countenance of the banker, he felt courage coming into his heart. The cowardice that had hitherto kept him down had all but died away.

It was already after banking hours, and the doors of the bank were closed. The examiner had nearly completed his task, and the clerks were hurrying with their work in order to get out of the sweet May air.

With a calmness that he had not felt before many weeks Robert "footed" his columns, balanced his accounts, closed his books, and put them away for the night. He had not wavered for an instant in his resolution. Yet when he knocked at John Imberlay's door, and heard the cold, distinct voice in which he was bidden to enter, his heart for instant faltered, and he faltered. But it was a moment only. Then he found himself facing employer.

Mr. Imberlay looked up impatiently as the entered. It was apparent from the books and papers on his desk that he was very busy, and he had not cared to be disturbed.

"Well," he said, shortly, "what is it that you wish?"

"I have come," said Robert, bluntly, "to make a confession to you."

The man stared at him in surprise, not mingled with alarm.

"To make a confession—to me?" he repeated.

"Yes," replied Robert, "if you please, to me. And when I have made it I shall have a favor to ask of you."

John Imberlay turned and faced the boy squarely, looking at him with keen eyes. Once, many years before, a young bank clerk had come to him and beginning with almost the same declaration and request, had pleaded guilty of embezzlement of the funds of the bank, and asked for clemency. The incident came back at this moment into his mind with unpleasant and startling distinctness.

"Well," he said, icily, "proceed."

Before Robert could utter a word of his explanation there came a knock at the door, and without waiting for a reply Mr. Ridgebury, cashier, entered.

"Excuse me for interrupting you, Mr. Imberlay," he said, "but Mr. Moore, the examiner, wishes to see you at once in the discount-room."

It was plain that something had happened, and the cashier's manner indicated excitement.

"I will come immediately," replied the president. "You will excuse me, Robert. I will hear you soon as I am at liberty."

So Robert returned to the banking-room while Imberlay went with the cashier. The boy was appointed at the delay. He had hoped that in minutes it would be all over and he should be the worst.

He busied himself about a dozen little things, watching anxiously meanwhile for Mr. Imberlay's return. Finally, Stewart, who had been called to the consultation in the discount-room, came, and in answer to Robert's anxious inquiry, that Mr. Imberlay was exceedingly busy, would not be at liberty again that day.

So there was nothing to do but to await an opportunity. It was most discouraging and heartening. The boy took his hat and came to a tumult of nervous excitement, left the bank

ALTHOUGH every one but Robert knew already that something had gone wrong at the bank, had been too much engrossed in his own trouble to realize that the officers had become greatly concerned over a matter to which the examiner had evidently called their attention. At the close of his examination Mr. Moore had seemed to pick up a deposit book left by a customer or curiosity than anything else, he had compared the balance as shown by the deposit book with the corresponding balance as shown by the individual ledger, and had found a marked discrepancy. It was a discrepancy covering many items and extending over a period of some months. It had strongly the appearance of design rather than of inadvertence or error.

Then he called for other deposit books, and in many of these he found the same conditions. It was apparent that the books had been systematically falsified, and it appeared probable that there had been a serious embezzlement of the funds of the bank. It was at this juncture he had sent for John Imberlay.

The president was shocked. He could not believe that any one now in the employ of the bank would be guilty of this crime. Only once, many years before, had anything like this happened in the institution, and in that case punishment had been so swift and severe that no one could make the attitude of the officers of the bank matters of this kind.

At the end of a half-hour's investigation he was advised that the bank had been systematically robbed. He gave directions that all employees should be detained, and that those already gone should be brought back at once. At the end of the second hour all were present with the exception of Robert Leighton. He could not be found, and he was more than any one else, was especially wanted.

It was not a difficult task, after the discrepancies had been discovered, to trace them to their source.

And that source was found to be in the books kept by Robert. The entries from certain deposit books had been placed upon the cash-book for lesser amounts than those shown by the slips; and it was found that exactly the right amount of cash had been abstracted to make the books balance with the cash totals. That the money had been taken by the person who falsified the entries was apparent; and these entries were all in the handwriting of Robert Leighton, and in the book kept by him alone. Their transfers to the ledgers and to the final balance-sheets were a mere matter of mechanical computation and copying.

THE prima facie against Robert was certainly strong. John Imberlay himself acknowledged that; and, aside from his detestation of the crime, it grieved him deeply. For behind his cold manner and his outward indifference, he had a soft liking for the boy.

For some reason, which he could not explain, he liked him since the day when, with his widow-mother, he had made such earnest and intelligent attempt to induce the president of the bank to give him on the Leighton mortgage. Imperceptibly, by day, week by week, this feeling had grown. It was in his manner, so skillful in his grasp of the bank's affairs, that it would have been strange if the president had not liked him. And now, in the face of all, came this suspicion of guilt, a suspicion amounting in truth to a practical certainty! John Imberlay could not fathom it. He rose and went to his own room, sick at heart. Then there came into his mind a recollection of Robert's attempt at confession hardly an hour before. The excitement immediately following that interview had driven the incident from his memory at this moment.

He had needed further proof of the boy's guilt. The incident surely would have furnished it. For what else could Robert have been about to confess to the fact of the embezzlement? He went into the counting-room to learn if Robert had yet returned, and finding that he had not, he sent another messenger with explicit instructions to bring him in at once.

This man came back, saying that he was quite unable to find him. He had been to his boarding-house, to the reading-rooms, to the park, to all places the boy frequented, but no one had seen him. When the first messenger returned, saying that Robert had been seen, about five o'clock, riding some one, post-haste, in a buckboard, in the direction of Broad Valley, those directors of the bank who were within had been sent for as soon as it became certain that there had been an embezzlement of funds, and when this information was laid before them, they decided that Robert must be brought back at once. It would be impossible definitely to ascertain the amount of the shortage until Robert could return and disclose the method and details of his crime.

Stewart pointed out the fact that the road along which Robert had been seen travelling was the

most direct route to the New York state-line, and that it would be useless to send a messenger for him unless that messenger were armed with the authority of the law to compel his return by force, if necessary.

So Mr. Ridgebury, the cashier, hastened to the office of Esquire Jenkins, and laid before that official the necessary information to procure a warrant for Robert's arrest. This warrant was placed in the hands of Constable John Potts, and he was directed to find the defendant forthwith and bring him into court.

It was arranged, however, that before answering to the charge Robert should be taken to the bank, and should be given an opportunity to make such explanation or confession as he might see fit, and give such information, if he would, as might lead to an accurate statement of the amount of funds abstracted.

There was no longer any doubt in the minds of those connected with the bank as to the boy's guilt. One after another, the clerks recalled incidents showing his anxiety, or abstraction, or embarrassment, the reasons for which they could not at the time explain.

It was true that Robert had been seen in a buck-



The Singing Tower and Mountain Lake Sanctuary.

board, driving rapidly toward Broad Valley. He had not intended to go there when he left the bank. His only thought had been to get out into the open air, away from prying eyes, where he could breathe and think.

There came over him a sense of homesickness, a desire to see his mother, to hear her voice, to feel her touch of sympathy and love.

Then he was startled by some one shouting out to him from the roadway:

"Hello, Bob!"

He looked up and saw Hiram Calkins, who lived on the next farm north of the Leighton place, seated in his buckboard.

"Hello, Mr. Calkins!" replied Robert. "Just going home?"

"Yes. Want to ride out?"

"Thank you."

He climbed into the wagon, laid his cane under the seat, and they started. His resolution had been sud-

denly formed, but he knew of no good reason why he should not go if he wished. Several times before he had been on a mid-week visit to Broad Valley, remained over-night, and returned by stage to Brierly before banking hours the next morning.

Hiram Calkins was a most entertaining talker. He knew every one along the road, and the history of every place, and he did not hesitate to tell all he knew. He prided himself also on the speed of his sorrel mare. Down the Wyanda River road and up Broad Valley Creek they almost flew, and just as the last red was fading from the western sky they drew up at the gate of Robert's home. He thanked Mr. Calkins heartily, descended from the wagon, and walked up the path. Already, in the sweet country air, in the open landscape, in the familiar scenes, he felt better, freer, easier. He felt that here, at any rate, he could find rest. Inside the house he heard voices and laughter. Then his mother appeared in the doorway. Her hands were lifted in surprise and apprehension as she saw him mounting the steps.

"Why, Robert!" she exclaimed. "You're not sick?"

"No, mother. I saw Mr. Calkins in town, and he offered to bring me out, and I thought I'd come."

"Well, I'm glad you did. You look so white and tired. The work in the bank doesn't agree with you; I can see that. But come in. Mr. Orchard and June are here."

"O Bob!" exclaimed June. "What do you think your mother has done? You see this is the first time daddy's been up here since he was sick, and Mrs. Leighton just forced us to stay to supper. And now here you come to complete the party. Why, Bob, how pale you look! Are you sick?"

"Oh, no! Mother and you think because I'm not tanned as I used to be this time of year I'm sick. There's nothing the matter with me, except that I'm hungry."

(To be continued.)

Your Opportunity to See Florida and Cuba

Readers and Their Friends Are Invited to Join
Pennsylvania Farmer's Third Vacation
Tour for Farm Folks

WHAT?—It is a tour through the principal agricultural regions of Florida, with visits to all the state's large cities and other points of interest—with an ocean voyage and a tour of Havana and rural Cuba besides.

WHY?—Because, by managing the tour as a reader service, and with the cooperation of the Seaboard Air Line Railway and Clyde-Mallory Steamship Company, Pennsylvania Farmer can offer the trip at about half what it would cost an individual for the same tour and the same first-class accommodations.

WHO?—Your family and friends, we and ours. Farm folks from nearly every county of Pennsylvania, New Jersey, Delaware and Maryland went on our first two vacation tours. They told us they enjoyed themselves immensely; we believe you will enjoy this one.

HOW?—By chartered Pullman cars and a special train with our own dining cars. Automobiles, buses and steamships for the sidetrips.

COST?—The total cost from Harrisburg or Philadelphia will be \$197.50. That covers all meals, fare, sidetrips and tips. You pay it in a lump sum before you start, then forget about money. You can leave your pocketbook at home. We make all the arrangements, pay all the bills, give all the tips and do all the worrying. A deposit of \$20 will reserve a place for you immediately.

WHEN?—Our special cars leave Harrisburg, Philadelphia and Washington on February 3rd, returning February 14th. Leave Pittsburgh late February 2nd.

Tour Manager, Pennsylvania Farmer.

7301 Penn Avenue, Pittsburgh, Pa.

Please send me booklet giving full information about the Florida-Cuba Tour. This places me under no obligation of any kind. 2-12-13

Name	.....
Town	..... R. D.
County	..... State
Also mail the booklet to the following who may be interested:	
Name	.....
Address	.....
Name	.....
Address	.....

THE YOUNG PEOPLE

Christmas Gifts from Material at Hand

LAST week "M. S." asked for suggestions for making inexpensive Christmas gifts. It has been rather a difficult job to select from the flood of excellent ideas that came to our desk just the ones we thought "M. S." would like. This only goes to show that if anything is wanted, ask the readers of The Young People's page. The prize-winning suggestions are given below:

From Mary Good of Pennsylvania—"For my little niece I am crocheting a soft brown cuddle dog with white spots."

"Aprons made out of unbleached muslin with rick-rack braid for binding and pretty applique flowers on the pockets are acceptable."

"A little sewing bag made out of some gay cloth and fitted with thimble, needle and thread for the friend who likes to sew; tiny monograms worked on squares of linen for the friend who travels."

"If there is a small sister in the family supply dolly with some clothes. It takes very little time and material to make these."

"A pillow top copied from some patch-work pattern, using scraps of dress material."

"For Mother, some pretty holders for the kitchen. Cut a round piece of white or light colored material, double thickness; place two or three thicknesses of felt or heavy cloth between the white pieces and bind. Then draw face of a girl or some figure; embroider with cotton; place a ring in the top."

For a City Friend

Hilda Davis, also of Pennsylvania, offers this suggestion: "I am sending a corn husk box full of farm goodies to a friend in the city. The making of the box requires only a one-pound candy box, some clean, dry corn husks, and spool of thread, a needle, thimble and a little spare time."

"To cover the box cut the corn husks into strips, one inch wide and two and a half inches long. Fold these lengthwise in the middle; fold into cone shape. Sew on to the candy box, beginning at the top, having the second row overlap the first row, etc. When you have reached the bottom of the box, place a row, with the cones turned on their sides, all the way around the bottom. These cones may be painted with water colors or left their natural color."

"Line the box with soft, bright colored material and sew on a ribbon handle of the same color."

Hard Times Presents

C. A. Tedrick of Ohio offers these easily-made gifts: "Make bedroom slipper soles of heavy pants or coat goods, using two layers with paste-board between to give the needed stiffness. Tops may be knitted or made of good parts of old sweaters. An old sock raveled or cut round in one long strip and wrapped around a tin box with a few grains of corn in it will make a fine rattle for baby. You can crochet a cover of bright colored string or perhaps material sewed all over it. An older child would prefer a ball that would bounce. Make it the same way over a piece of rubber."

"A sock top split a short distance down either side, then sewed across the end, leaving a space in the center for the neck, will make a fine doll sweater if the neck and sleeve spaces are nicely finished. The fancy top gathered together with a little tassel or pom-pom of yarn will make a cap to match. The same idea could be

used for a real baby, using two socks sewed together."

"Sugar sacks bleached of their printing and marked with very simple designs will please the little girl who is just learning to sew. She will be glad to embroider them and make a spread for dolly's bed. Her older sister might like them just as well for her own room."

"Unbleached feed sacks make nice aprons either as they are or colored. Binding or a little applique from the rag-bag makes them quite dressed up."

"Make your silk scraps into bow ties for the boys. It's not hard if you use an old one for a pattern."

"Any child would like a notebook cover—extra leaves of wrapping paper—to paste stories and poems, recipes or party suggestions. Hard times can't cheat the children in the country when Santa's helpers use the materials found on the farm or in the house."

For Sister's Dolly

"I am making a table, chair and rocker for my little sister's dolly. The legs, backs and braces are from limbs of trees with the bark left on."

Roy Dunkle.

A Mosaic Vase

"If you're Scotch, you have saved last year's Christmas envelopes which were lined with colored paper. Take a nicely shaped glass jar or crock, wash and dry it thoroughly, then cut the pieces of paper, paste them carefully on the vase. Let this dry overnight. Then take a brush and black paint and outline every piece of paper. This also should dry overnight. Now paint the entire surface with pure white shellac, giving the vase a glossy look. A pair of these vases makes a nice present."—Rosemary Hollebaugh, Pennsylvania.

From Match Boxes

"We girls never have too many boxes in our rooms," says Olivia Roland. "Take nine match boxes, nine shoe buttons or round beads and enough pretty wall paper to cover the boxes. First cover the front of each box, then paste your match boxes together in three tiers. Cut the paper to fit the sides, back and top. Sew the shoe buttons or beads on the front."

The Singing Cat in Verse

Tommy Kat decided to sing.
He picked up his uke and played on the string.
He opened his mouth and gave out a squeal
That sounded just like our old automobile.
—Winston Roland.

We have a cat that catches rats
And sings with joyous glees.
She eats the bugs that meet our rugs
And she's "Home, Sweet Home" to the fleas.
—Robert Mack, Jr.

The singing cat was here today,
And he sang with all his might,
He was singing to his mate so gay:
No doubt he sang all night.
—Shirley Mae McLeod.

Oh, hark! What lovely music!
Said pretty Pussy Scoop.
As she listened to her sweetheart,
As he sang and played his uke.
—Edna C. Blosser.

The jolly singing pussy cat
Who likes to play his fiddle,
Likes just as well to sing his rat
To fill him in the middle.
—A. H. Hornish.

Listen to the singing,
Singing "Tra, la, la, la,"
I love to sit on the dolly's mat
With you, my darling sweetie.
—Verna Delp.

Beneath her window, on a moonlight night,
He sang to his darling so soft and white.

"Come with me, Pussy, out here to the barn.
We'll catch lots of rats where it's nice
and warm."
—Doris Brown.

Glad to Be An American

By VIRGINIA CHAMBERLIN

WE are a free and independent nation, also a modern nation, not ruled by a lot of old and worn-out laws and customs. We are an intelligent and progressive people, and even though this is a young country, it is equal to all and superior to many of the other nations.

Our people are not ruled by a privileged class who oppress those less fortunate than themselves, but the officers of our government are the choice of the people, and every person has a right to say how he shall be governed. Also any citizen may, by his own efforts, become the head of the nation.

America's freedom has been purchased with the lives of many brave men who have made pages of history.

This is a beautiful country with its rolling plains and busy cities. It also has a delightful climate, and is to me the very best place to live.

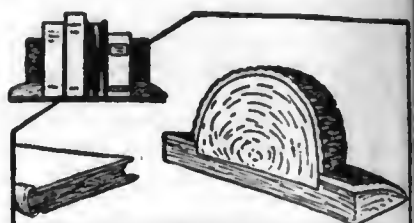
This nation is foremost in peace, happiness and prosperity, and its people have a great deal to be proud of and to live up to, therefore, I am very glad that I am an American.

Editor's note—Watch for other prize winners next week.

Rustic Book Ends

Did you ever think that you had some ideal material right out on the old woodpile for making some rustic book ends for your desk? Some day when you have a little time, saw and a jackknife, try making a set like those illustrated here.

Each end consists of a slab of wood about four inches wide and ten inches long with the bark left on. Smooth the split edges down with a plane or



wood file. Cut a cross section of wood about two or two and one-half inches thick, divide in half and fit carefully into a groove in the slab and glue.

Be careful when fitting the vertical to the horizontal piece to insure a good fit. Long wood screws put through from the bottom with the edges also covered with glue, will hold them together. Small brads can be used to prevent the edges of the bark from warping up.

Finish with a coat of clear varnish and glue strips of felt to the bottom of each part.

Little Folks' Corner

Timmy Twichet to the Rescue

By RUTH PLUMLY THOMPSON

(Continued from Last Week.)

"Somebody," said Timmy, grimly buttoning his raincoat. "Somebody will have to shut that window."

"But only a two-leg could do that," quavered the old mouse grocer turning pale beneath his fur. "Better not venture out, or you'll be killed, sir!"

"Well, what of the women and children?" demanded Timmy Twichet indignantly. "Are they to perish in the storm? I, for one, am going out and whoever wants to, can come with me!"

"I don't want to, but I'm coming," shivered Tiny Wee Bit turning up the collar of his pajamas. "Somebody's got to do something!" So while the grocer and tailor cowered behind Timmy's largest sofa, the Mayor and valiant little carpenter rushed bravely out into the night. A scene of wildest confusion met them, and the screams of the mice as their houses and stores blew hither and yon were positively heartrending. But sticking doggedly to their course, Timmy and Tiny fought their way toward the window. Twice they were buried under newspapers and once knocked down by a flying box, but finally, wet and exhausted, they reached the window ledge itself.

"Now that we are here, what?" gasped Tiny, his teeth chattering with cold and fright.

"Climb the curtain," directed Timmy, seizing the ragged piece of dimity. "Careful, now, don't fall, everything depends on us. Once up—" Timmy shouted a few quick orders and next minute the two intrepid mouse gentlemen were climbing paw over paw up the curtain, banging backward and forward against the screen till they were black and blue under their fur. But not only did they hang on, but climbed to the very top. Then, Timmy on one side, and Tiny Wee Bit on the other, began to gnaw the window cord. Fortunately the window was not all the way up, and the cord was exposed on both sides, and presently, with a slam that convinced the terrified villagers that the



Drawn by Helen Minnis.

Color the picture and hurry it to Little Folks' Corner, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa. There will be ten prizes.

PASSING EVENTS IN PICTURES



1. The first Thanksgiving proclamation, signed by President George Washington on October 3, 1789, is now on exhibition at the Library of Congress in Washington. This historic document was lost for almost 100 years and was finally purchased in 1921 for \$300.

2. A new picture of President Hoover and the members of his Cabinet, at the White House. Left to right, front row: Secretary of the Treasury Andrew Mellon, Vice President Charles Curtis, President Hoover, Secretary of State Henry L. Stimson and Secretary of War Patrick J. Hurley.

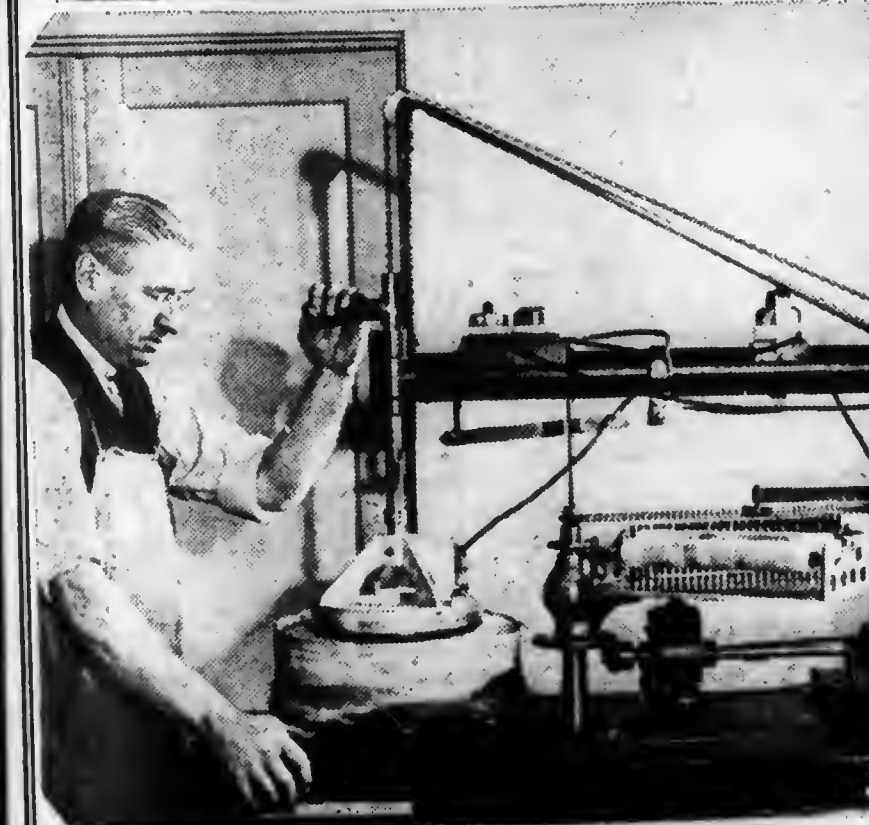
Back row, Secretary of Commerce Robert F. La Follette, Secretary of the Interior Ray L. Wilbur, Attorney General William D. Mitchell, Postmaster General Walter F. Brown, Secretary of the Navy Charles F. Adams, Secretary of Agriculture Arthur H. Hyde and Secretary of Labor James J. Davis.

3. A new cheese branding machine which will indelibly stamp a grade mark similar to that found on meat, has been developed by the United States Department of Agriculture.

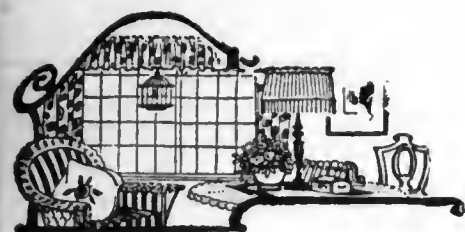
4. Oakland, Cal.—Miss Gladys Lasky, winner of the National Butter Churning Championship at the Pacific State Dairy Show.

5. A new and especially posed portrait study of General Douglas MacArthur, newly appointed Chief of Staff of the United States Army.

6. Sherman county, Kansas.—The gigantic ear of corn contributed by Sherman county to make the annual Corn Husking Contest a success. A week's time and thousands of small ears of Kansas grown corn were required to make up this big ear.



(Copyright by Underwood & Underwood.)



The Farm Home



Home Canners

By JULIA KIENE

IN spite of the so called drouth and the apparent lack of fruit and vegetables to can, the National Canning Contest recently held under the direction of the Household Science Institute at Shenandoah, Iowa, was the biggest and finest that has ever been held. Evidently it takes more than dry weather and extreme heat to make a farm homemaker stop her canning activities.

The Pennsylvania Farmer, feeling proud of the farm homemaker of the state and wishing in some way to make open recognition of her ability, offered beautiful silver loving cups to the Pennsylvania women who canned the best jars of fruit, vegetables and meat.

The judges of this contest included such nationally known home economy experts as Dr. Louise Stanley, Chief of the Bureau of Home Economics, Washington, D. C.; Mrs. Josephine Arquist Bakke, leader of Four-H (ut work in Iowa; Miss Elaine Massey, leader of girls' Four-H Club work, Mississippi; Miss Frances Swain, president of the American Home Economics Association, Chicago, and Miss Elizabeth Satter, department of home economics, University of Wisconsin. It was their opinion that never had they seen such outstanding fine jars of home canned products.

To Mrs. Frank Bennett of Doylestown, Pennsylvania, on her jar of white cherries came the highest canning honor in the state of Pennsylvania. She not only won the loving cup offered by this paper, but she had the honor of having the third best jar of fruit out of the 7,000 or more cans of fruit exhibited. Mrs. Clarence Friedline, of Sipesville, had the prize canned jar of vegetables for the state; her entry being beets. To Mrs. E. J. MacDonald of Allison Park came the honor of having the best jar of meat exhibited by a Pennsylvania housewife.

Stuffings for Holiday Birds

AS a change from the ordinary bread stuffing for the Christmas bird, the New York state college of home economics here suggests oysters, chestnuts, sausage and various other stuffings and gives directions for making them.

For chestnut stuffing, blanch a quart of chestnuts and cook them in boiling water until tender. While they are still hot, rub them through a coarse sieve and then add one-third of a cupful of bread crumbs, three tablespoons of butter, two tablespoons of cream, salt and pepper to taste, and a little lemon juice. Mix the ingredients well and then stuff the bird.

A favorite oyster stuffing is made by mixing with a pint of oysters, two cups of dry bread crumbs, one-fourth cup of melted butter, a teaspoon of salt and one-fourth teaspoon of pepper.

A moist and delicately flavored stuffing may be made with apples and celery as its base. Fry a tablespoon of minced onion in two tablespoons of butter until slightly browned. To this add one cup each of minced celery and apple; cook the mixture five minutes and then add a cup of soft bread crumbs, salt and pepper to taste, and, if desired, hot water or stock to make the dressing more moist.

Sage Stuffing

Persons who like a well-seasoned dressing find sage stuffing good. This requires two cups of bread crumbs soaked for an hour in one-half cup of milk, after which one and one-half tablespoons of melted butter, one egg beaten, and the seasonings are added. A well-balanced combination of seasonings consist of one-half teaspoon each of salt, powdered sage and chopped onion, and one-fourth teaspoon each of pepper, thyme and summer savory.

Celery stuffing is easy to prepare and has a mild and pleasant flavor. To one-half a bunch of celery, cut fine, add two tablespoons of melted butter mixed with a quart of stale but not dry bread crumbs. Season the mixture with two teaspoons

of salt and one-half teaspoon of pepper and, lastly, add two eggs slightly beaten.

Sausage stuffing is made from half a pound of sausage meat mixed with two cups of dried bread crumbs and seasoned with salt, pepper and a tablespoon each of onion-juice and minced parsley.

Celery Fritters

NOTHING like crisp vegetable fritters as an addition to a plate of cold sliced meat of any sort. The Bureau of Home Economics of the U. S. Department of Agriculture tells how to make celery fritters:

One and three-fourths cups sifted soft-wheat



Three silver loving-cups were offered by Pennsylvania Farmer for the women of that state who were prize winners in the National Canning Contest at Iowa.

flour, three-fourths teaspoon salt, two teaspoons baking powder, one egg, one cup milk, two cups chopped celery, one tablespoon melted fat. Sift together the flour, salt and baking powder, add the beaten egg, milk, celery and fat. Fry the fritters in deep fat or, if preferred, in a skillet in shallow fat. In either case drop the mixture by spoonfuls into the fat and fry rather slowly. The fritters need time to cook through to the center before the outside becomes too brown. Drain the fritters on absorbent paper and serve hot.



Velvet for All Occasions

My girls and I prefer velvet dresses to all others for the winter months. They are dressy enough for the finest affairs, and not too dressy for the various young folks' activities in school and church. They wear well and are more easily kept in tip-top shape than any other material. Very little trimming is needed and the colors we find in velvet are bright and youthful. Pattern No. 6983 on the next page is especially good for making her Christmas frock of velvet.

G. S. S.

Specialists for Health

By R. G. BEACHLEY, M. D., Dr. P. H. and NELL C. WESTCOTT

IN any series of health articles the words "see a specialist" are apt to occur frequently and the word "specialist" strikes terror to the minds of many people. They immediately think of huge bills, of operations, hospitals and more bills. The mother of six children, a farmer's wife, hunted up a well-known eye, ear, nose and throat specialist in the nearest large city and said to him: "My children need their tonsils and adenoids removed according to their school reports and also according to our family physician. I am a poor woman but I want my children to have the best skill and care in this operation. What would you charge to take them out by the dozen?"

The great surgeon laughed and told her to bring her children to him for examination. He found the operation was necessary and made a rate within her means. She was unable to pay the bill all at once but made her payments regularly until the bill was wiped out.

Her cousin, also a farmer's wife of moderate means, put on her two diamond rings, her best bib and tucker and went to the same surgeon with her one boy. She said nothing about her circumstances, looked like a person of means and when she received her bill sat down and wept. It was just three-fourths as much for her one boy as the surgeon had charged her cousin for removing the tonsils by the dozen.

If you need a specialist, and your limited means makes it an alarming matter, take your own family physician into your confidence. He will make arrangements for you either in a clinic or with some specialist where you will receive the best care at moderate cost.

Hospitals have free clinics and if one needs care for which he is unable to pay it is a false pride that keeps him from obtaining such care. On the other hand, if one has means it is nothing short of dishonesty to misrepresent one's position and take advantage of the generosity of a specialist.

It is a day of specialists! It stands to reason that the man who has made one branch of medicine or surgery his life work is better able to cope with that particular problem than the general practitioner.

Your family physician will always act as go-between for you and the needed specialist so do not let the word frighten you nor let your fright deprive your child or yourself of the needed advice and care of a specialist.

Roast Pig

AT a birthday dinner last winter we surprised our guests by serving a young roast pig. We were a little doubtful as to the outcome of the undertaking but the novelty of the idea was so appealing we could not resist the venture. The affair was all we hoped it would be. The meat is white and tender and the flavor delicious. From our experience I offer the following directions:

Prepare dressing the same as you would for fowl. A fifteen-pound pig will require a loaf and a half of bread. Take a young pig six or seven weeks old. Wash thoroughly inside and outside. Rinse inside with soda water, wipe dry, and stuff with prepared dressing making the pig full and plump; then sew it up. Place in kneeling posture in roaster tying legs in proper position. Pour a little hot salt water into the roaster and baste with butter and water as the pig warms, then rub with gravy from roaster. When it smokes all over rub with cloth dipped in melted butter. This will keep the skin from cracking. It will take about three hours to roast. Skim off grease and make gravy as usual.

To serve, place the pig on a large platter and garnish with plenty of parsley. Place a small red apple in its mouth and fasten a wreath of parsley around its neck. In carving, first cut off the head, then take off hams and shoulders and separate ribs. Marguerite McCreary.



A New Dress for Christmas

No. 6983.—Cut in eight sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 16-inch size requires 5½ yards of 39-inch material. For contrasting material 1 yard 39 inches wide is required cut crosswise. Price 15c or two for 25c.

No. 6985.—Cut in eight sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 16-inch size requires 5½ yards of 39-inch material. The width of the dress at the lower edge with fullness extended is 2½ yards. Price 15c or two for 25c.

No. 6983.—Girls' dress. Cut in four sizes: 8, 10 and 12 years. A 12-year size with long sleeves requires 2½ yards of 35-inch material. With short sleeves it will require 2½ yards. The collar and cuffs of contrasting material require ¾ yard of 30-inch wide, cut crosswise. Price 15c or two for 25c.

No. 6988.—Ladies' dress. Cut in five sizes: 31, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 3½ yards of 39-inch material. If made with the capelet, without the capelet 3 yards will be required. Price 15c or two for 25c.

No. 6987.—Girls' dress. Cut in four sizes: 2, 3, 4 and 5 years. A 2-year size requires 2 yards of material 32 inches wide or wider. If made of flouncing 27 inches wide 2½ yards are required. Price 15c or two for 25c.

No. 6988.—Girls' dress. Cut in five sizes: 1, 2, 3, 4 and 5 years. A 4-year size requires 1½ yards of 39-inch material. To

trim with lace edging requires 4 yards. Price 15c or two for 25c.

No. 6989.—Dress for junior miss. Cut in 4 sizes: 12, 14, 16 and 18 years. A 16-year size requires 3½ yards 39 inches wide. Tie and sash of ribbon requires 3 yards. Price 15c or two for 25c.

No. 6976.—Ladies' undergarment. Cut in four sizes: Small, 31-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. A medium size requires 2-1/3 yards of 39-inch material. For yoke facings of lace 1-1/3 yards is required 5 inches wide. To trim with lace edging requires 3-1/2 yards. Shoulder straps of ribbon require 1½ yards. Price 15c or two for 25c.

No. 6990.—Ladies' blouse. Cut in five sizes: 31, 36, 38, 40 and 42 inches bust measure. A 38-inch size of one material requires 2½ yards of 39-inch material. For contrasting material ½ yard 39 inches wide is required. Price 15c or two for 25c.

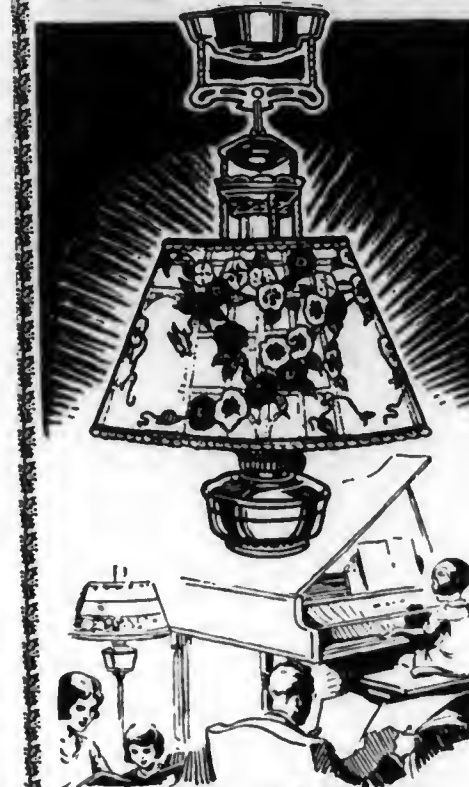
No. 6986.—Ladies' dress with slender hips. Cut in eight sizes: 38, 40, 42, 44, 46, 48, 50 and 52 inches bust measure. A 40-inch size of one material requires 4½ yards 39 inches wide. For contrasting material or lace ½ yard 39 inches wide is required cut crosswise. Price 15c or two for 25c.

HOW TO ORDER

Write plainly, giving pattern number and size. Address: Pattern Department, Pennsylvania Farmer, 7301 Penn. Ave., Pittsburgh, Pa.

At Christmas Time and the whole year 'round

Your Whole Family Will Enjoy This MODERN WHITE LIGHT



Save Its Cost in a Few Months' Time

Not alone does this remarkable new lamp give you an abundance of pure white light but it costs so little kerosene compared to the old style oil lamp, that it will actually save its cost in a few months, and continue to save and save, year after year. In supplying yourself with an Aladdin you are in reality making an investment which pays you liberal dividends as long as you use oil for lighting.

Will Both Brighten and Beautify Your Home

A match and a minute is all it takes to light it. Burns common kerosene (coal oil) with 94% air—only 6% fuel. Gives a modern white light nearest to sunlight. Burns without smoke, noise, smell or trouble. Absolutely safe. Operates as simply as the old style lamp and runs for 50 hours on a gallon of oil. Tested by 33 leading Universities and Colleges and every claim verified. Approved by Fire Underwriters and Good Housekeeping Institute. No other artificial light has such endowments.

The New Instant-Light Aladdin Mantle Lamp

Exquisite Shades — Beautiful multicolored shades in either glass or parchment are available—exceedingly decorative and pleasing in design. Plain glass shades 10¢ if you prefer.

A Style for Every Purpose at a Price to Suit Every Purse — Aladdins are modern too in style and finish to be used in table, vase, hanging, bracket and floor lamps—a style for every purpose and need.

Ask Your Dealer — If your Dealer cannot supply you write us for information.

The Mantle Lamp Company 609 W. Lake St., Chicago, Ill.

Mothers, Mix This At Home for a Bad Cough

You'll be pleasantly surprised when you make up this simple home mixture and try it for a distressing cough or chest cold. It takes but a moment to mix and costs little, but it can be depended upon to give quick and lasting relief.

Get 2½ ounces of Pinex from any druggist. Pour this into a pint bottle; then fill it with plain granulated sugar syrup or strained honey. The full pint thus made costs no more than a small bottle of ready-made medicine, yet it is much more effective. It is pure, keeps perfectly and children love its pleasant taste.

This simple remedy has a remarkable three-fold action. It goes right to the seat of the trouble, loosens the germ-laden phlegm, and soothes away the inflammation. Part of the medicine is absorbed into the blood, where it acts directly upon the bronchial tubes and thus helps inwardly to throw off the whole trouble with surprising ease.

Pinex is a highly concentrated compound of genuine Norway Pine, containing the active agent of creosote, in a refined palatable form, and known as one of the greatest healing agents for severe coughs, chest colds, and bronchial troubles.

Do not accept a substitute for Pinex. It is guaranteed to give prompt relief or money refunded.

PINEX for Coughs

HOTEL PENNSYLVANIA ROOM BATH \$3.00

85¢ WALL PAPER To Paper a 10x12 Room Complete

Send for FREE Catalog B. A. F. DUDLEY, 52 N. 2nd St., Phila., Pa.

ACHES and PAINS Quick Relief with JAPANESE OIL

"Don't Let Pain Keep You At Home."

Antiseptic Japanese Oil is used by millions of busy people instead of hot water bags, electric devices, groovy salves, sticky plasters for Rheumatism, Neuralgia, Neuritis, Sore Muscles, Sprains, Stiff Joints—Pains caused by fatigue and exposure. Rub it in. It gives instant relief. It is the best remedy for all pains. QUICK! Won't blister like old type liniments.

HEAD COLDS CHEST COLDS

Japanese Oil often relieves them in 24 to 48 hours. For head colds inhale antiseptic vapors. For chest colds, congestion, sore throat rub it vigorously.

46 Years Success Behind It! At Druggists.

The pedigree of quality goods

Every stockman knows the value of pedigrees. A cow whose dam and sire have a good record is more likely to become a high producer than one of unknown lineage. Likewise the merchandise you buy to fill the weekly needs of your home and farm, should have a pedigree, a name that stands for established worth. In a true sense, the advertising pages in this farm paper are a record book in which you can find a list of the most reliable goods on the market.

These advertisements are inserted by reputable firms who offer you the products you need on the single basis of giving you a dollar's worth of quality for every dollar spent. They are honest statements for the advertiser knows that he could not remain an advertiser were he to mislead the printed page.

7 SECRETS boost profits

Every month Poultry Item gives a new "secret" for making more money with poultry. In fact

The POULTRY ITEM

is "the biggest help you can get toward real profits in poultry". Tells how to get more eggs when eggs pay best. Plenty of other help, too. Best reports on egg laying contests — and a real Free Service Department.

Subscribe now! Only 10 cents for 7 months, stamps or coin. Use coupon below. Satisfaction guaranteed. Send today!

The Poultry Item, Sellersville, 706, Pa. Enclosed is 10¢. Send me Poultry Item with the seven "Secrets" articles.

Name _____
Address _____

Navy Brand Concentrated Buttermilk
From Tuberculin Tested Cows
2% fat, 12% solids, 6% acid, 10% water. No salt. No sugar. No preservatives. No artificial coloring. No artificial flavoring. No artificial anything. Just pure, clean, fresh, rich, and delicious. Perfect for all uses. Sold in 100 lb. cans. Titusville Dairy Products Co., Titusville, Pa.

Truslow Chicks
Result of 49 Years Breeding
Let me give you a book telling about wintering, brooding, and raising chicks. It's a real money maker. Write today. It's FREE. TRUSLOW POULTRY FARM, Inc. Box P-12, Chestertown, Md.

LOTS OF EGGS — BIG EGGS
Hosville Accredited White Leghorns have been bred for over ten years to produce big eggs and lots of them. Get into the egg business now!
10 FREE CHICKS
Order before March 1st. Get 10 free chicks with each order. \$1.00 down (balance later). Pay when you get chicks. Write today for catalog. HOSVILLE, ACCREDITED HATCHERY, 117 Main Street, Hosville, Ohio.

PARKS' BARRED ROCKS
Fast and chicks now at 10¢ price.
Parks' Barred Rock is America's greatest laying strain of Barred Rock. Carefully selected, trained, and bred for high production and standard quality. Shows in all shows. Bred by J. W. Parks & Sons, Box 6, Altoona, Pa.

OUR FREE BOOK
will be mailed to you if you will write for it NOW! telling all about our 1931 Choice Bred Chicks from R. O. P. and Pedigreed Males and Choice Females. Read what others say about our Hardy Chicks and Great Layers—they will do as well for you. Linesville Hatchery, Linesville, Pa.

BROILER—RAISERS
SHIPPING CRATES LOANED FREE
SHIP YOUR LIVE BROILERS AND FREE CRATES TO NEW YORK'S oldest Live Poultry House. Ref. 1923. We are bonded commission merchants. Birds fed returns made daily. Delivered broilers. Our outlet is unlimited. Inquire about us. Write for quotations, crates, tags, shipping instructions. "Broiler Calendar." Folder P-2. KRACKAUER POULTRY CO., Inc., West Washington Market, New York City.

FAIRMONT'S BETTER PURE FLAKE BUTTERMILK
Distributed by Omwake Bros., Greencastle, Pa. ASK YOUR DEALER.

WHITE LEGHORN CHICKS
Farris and Hollywood Strains
Order now. For Feb. March & April. Price \$100.00. Send for catalog. "White" Title. Also about our other growing Leghorns. JUNIATA POULTRY FARM, Box 2, Richfield, Pa.

PLEASE mention Pennsylvania Farmer when writing to our advertisers. They want to know and we want them to know that you read it all.

Poultry Problems

A Change in Feed

I have 225 White Leghorn pullets, hatched March 15. When they were eight weeks old I began to feed stale bread soaked in skim milk. They started to lay in September and until the fifth of October I had an egg production of 86 eggs per day. About a week later I could not get any more skim milk and I had to feed dry bread. The result was my egg production began to drop to 50 to 55 eggs per day. R. G.

PULLETS in the fall are very susceptible to any change in feeding or management, which shows up in the egg yield or may even cause molting. For that reason we always recommend making any contemplated changes gradually, in order to avoid interfering with production. Probably the lack of milk, plus the cold weather, threw your birds off.

Bread is somewhat fattening, and would tend to keep up the body weight, which is desirable in laying birds. Combined with skim milk or buttermilk, as you are feeding it, I would consider it good for the birds, if not fed to excess. R. L. S.

Ration for Layers

Will you please send me a ration for laying hens laying wheat, oats, barley and corn? What else is needed for a complete ration? Will skim milk take the place of buttermilk? Russell N. McConnell.

A MASH recently recommended to use ground wheat is composed of the following ingredients: ground wheat, 40 lbs.; corn meal, 20 lbs.; meat scrap, 20 lbs.; ground oats, 13 lbs.; dried buttermilk, 2 lbs.; fine oyster shell, 2 lbs.; bone meal, 2 lbs.; common salt, 1 lb. For scratch feed, 60 lbs. wheat, 23 lbs. cracked corn.

I believe that you could also mix up a satisfactory mash as follows: ground wheat, 200 lbs.; ground oats, 100 lbs.; corn meal, 50 lbs.; ground barley, 50 lbs.; meat scrap, 100 lbs.; ground oyster shells, 10 lbs.; common salt, 1 lb. For scratch feed, 200 lbs. wheat, 200 lbs. cracked corn, 100 lbs. oats, 100 lbs. barley.

Poultry rations differ widely as to ingredients in different sections, depending on what feeds and grains are most abundant locally or cheapest. The general idea is to have about 20 per cent of the mash composed of meat scrap or some other animal protein, and to avoid feeding too much of such bulky grains as oats, barley and buckwheat. If you have lots of skim milk, let the hens have all they want to drink in addition to the animal protein in the mash, only do not feed it in galvanized containers, as it may form poisonous compounds with the zinc. R. L. S.

Use of Lights

Would you please tell me the proper way to start using electric lights on laying hens? We have 180 pullets and 80 old hens. The old hens are just molting but we are getting about 90 eggs a day from the pullets. Could you give me a good formula for mixing laying mash, using oats and possibly buckwheat?

We are feeding hens all the cabbage they will eat for green food. We have a new house and most of the birds seem in fine shape, but it doesn't seem as if they are laying as they should. There are a few that don't seem to be developed well. Would you advise keeping them? Mrs. Arthur Slicker, Susquehanna county, Pa.

IN order to put lights on your laying pullets without making any sudden change, it would be best to start the lights a little before daylight at first, and put them on a few minutes earlier each day until the birds are getting the lights about four in the morning. An alarm clock and simple switch will do this automatically.

If you are using evening lights, increase the period of lighting in the same way. The idea is to give the birds about fourteen hours for a day. You may give the birds a light feeding of grain after they are on the roost for the night, so that they will find it the first thing in the morning,

in addition to your regular schedule. This light feeding should not upset them.

These directions are for the pullets. The old hens should be allowed to molt during the winter, and can have lights along in January, when they are about ready to lay again.

A well known formula for laying mash follows: 100 lbs. each of bran, middlings, corn meal, ground oats and meat scrap.

Your production from the pullets is not bad, but might be raised to 50 or 60 per cent. Possibly they are getting too much cabbage. No doubt the use of lights will increase production. If the few pullets you mention do not seem right, better get rid of them, although it may be that if you keep them by themselves for a time and give them a worm remedy they will improve. R. L. S.

Feed Problems

I have about seventy-five pullets. I feed them scratch, laying mash and whole corn. How should I feed these three? Is it better to feed the corn shelled or is it better to chop the ear and make them work for the corn? What kind of straw is best to litter chickens with? Do you consider corn ears hung up as a good chicken exercise? What kind of green stuff are chickens fond of? Wm. Galvin, Hunterdon county, N. J.

IN your place I would give the pullets free access to laying mash at all times, feed a light feeding of scratch in the morning, and a full feeding of shelled corn at night. Some farmers feed corn on the cob, but most poultrymen prefer to feed it shelled. I think that if you give your birds wheat straw for litter they will get all the exercise scratching that they need, without hanging up corn ears for them to pick at. R. L. S.

Feather Eaters

Could you advise me what to do to chickens that eat the feathers? They eat the feathers and then eat at the chicken till it dies. If we do not see it. We feed them cut hay, oats soaked in water for 12 hours, wheat, corn, laying and growing mash with beef scrap, a poultry powder, sand and grit. Lehigh Co., Pa. Mrs. U. A. Schmoeyer.

FEATHER eating is a vice which often starts among young chickens and continues after they are ready to lay. Very often crowding starts the habit, which may also develop into cannibalism. Once this habit is formed, it is very difficult to control. Sometimes it happens that one or two individuals in the flock cause all the trouble, and if you can spare a little time to watch your birds you may discover the ring leaders. If these birds are removed from the flock, it may stop the picking. R. L. S.

Laying Mash

Please tell me if this is a good laying mash for hens: 35 lbs. beef scrap, 35 lbs. fish meal, 15 lbs. dried buttermilk, mixed with 400 pounds of other ingredients. Or would all beef scrap be the best without the fish meal and dried buttermilk? P. H. Startzell, Jefferson county, Pa.

THE mixture of meat scrap, fish meal and dried buttermilk you suggest should be much better than meat scrap alone. R. L. S.

Fowl Typhoid

My spring chickens now six months old have been dying. They apparently seem healthy and all right. Find most of them dead under the roost in the morning. An examination showed liver and gall twice the normal size. Can you tell me the cause and cure? O. O. M.

THE symptoms you describe may be those of fowl typhoid or of fowl cholera. The latter is more common at this season of the year.

I do not know of a remedy for either disease, but the use of enough permanganate of potash in the drinking water to give it a wine color will

help to prevent infection through that source.

In treating the outbreak, you should remove all sick birds from the flock, and put the well birds in a different building if possible, watching them carefully and removing at once any that become sick. Diseased birds should be destroyed and either be burned or buried deeply. The house should be thoroughly cleaned and disinfected and the yards plowed, limed and cleaned up generally. It is best to keep the birds confined in a clean house during the course of the disease.

I think it would be a good plan to get in touch with your County Agent and ask for his advice, which of course is free. R. L. S.

Paralysis

Can you tell me what to do for my pullets? They seem to be paralyzed in the legs and back. Can hardly walk. Fall over on their backs and can't get up. W. M. K.

THE paralysis in your chickens is a disease which has been giving poultrymen a lot of trouble lately. Unfortunately, so far as I know there is no certain remedy for it. Some poultrymen have been using the Euteritis Powder, and in some cases feel that it has helped their birds. It might also prove helpful to give your birds one of the worm treatments which you see advertised as birds which are infected with intestinal worms sometimes go lame. Also, remove any ailing birds from the flock, in order to avoid possible spread of the disease, and clean the buildings well. R. L. S.



Nest Box Notes

By R. L. SCHARRING-HAUSEN

PULLETS which have just started to lay are touchy critters, and any sudden change of feeding or management may throw them out of production or even cause molting. Once pullets are housed, it does not pay to move them to another pen, and if any changes are to be made in the way they are being fed or taken care of, these should be made very gradually, in order to avoid upsetting the birds.

EGG prices generally reach their peak during November, and after the Thanksgiving turkey has been carved begin their downward march, which is not arrested until some time in the spring. It used to be that egg prices were highest in the winter, but since folks have learned to hatch early enough so that pullets would lay before cold weather, prices have been highest in the fall, at the season when the old birds are quitting and the young ones have not quite hit their stride.

When to Remove Mulch

At the end of winter skillful management of the mulch will do much to assure a heavy crop. If warm, wet weather sets in the plants may smother and decay unless the mulch is partially removed from above the plants. A favorite means of meeting such a situation is to go along and shake up the mulch so that air may circulate beneath it. Of course the plants probably will push through a light mulch without much difficulty.

A common rule is to remove the mulch as soon as the plants show signs of blanching and before any considerable blanching or yellowing has occurred. In doing this enough straw to insure clean berries should be left in the row. Finally it is possible to bring fully opened blossoms safely through quite a frost if the mulch is scattered lightly back over the rows until the cold "snap" is past.

Truck Crops

By GILBERT S. WATTS

A GAIN it is time to mulch strawberries. As the job is undertaken it may prove profitable to recall certain experiences with mulches in previous years. Three tons per acre of clean wheat straw seems to be about the least amount that can be expected to do the work that a mulch should do. Once we ran short and the last acre of a patch was skimmed to about two tons. As a result many weeds pushed through and we had too many sandy and muddy berries. Liberal mulching also is likely to retard blossoming with attendant reduction of risk from frost.

A Good "Catch"

Another time a lot of straw was purchased and turned out to contain a considerable number of ripe timothy heads. The picking season was rainy. Needless to say we had a fine stand of timothy between the rows, wherever there was a square inch of unoccupied soil a hundred timothy seedlings sprang up. Any material that is to be used for mulching strawberries should be unusually free from weed seeds. Especial care should be given this matter when one plans to fruit a plantation more than one year.

That brings us to the matter of being tempted to use straw manure for mulching strawberries. Once again it is a question of weeds. One year I mulched four rows with what I considered comparatively weed free manure. The resultant crop of weeds was so rank that the yield of berries was greatly curtailed and we had to mow the strip with a scythe so that the few berries present could be found.

Effects of Wind

And wind! How it can play havoc with a carefully laid carpet of mulch! One winter at least a third of the mulch on a five-acre field was moved to a neighboring farm and most of what remained had drifted into piles and windrows. Shifting is much less likely to occur if mulch can be placed just before rain or snow falls. I have known of wires being stretched and pegged down at intervals over the rows to hold mulch in place in very windy locations. Possibly a light scattering of heavy corn stalks would be effective to a degree in holding the mulch.

The experience of a great many growers is that clean wheat straw is hard to beat for mulching strawberries. Oats or buckwheat straw may be used but mats down a little too easily. Leaves blow away very readily in exposed locations and may smother the plants if applied heavily over the rows and wet weather follows. Pine needles are in common use where they are easily available. Corn stalks are too coarse but have been used successfully when shredded. Along the seacoast salt hay is used to a considerable extent.

When to Remove Mulch

At the end of winter skillful management of the mulch will do much to assure a heavy crop. If warm, wet weather sets in the plants may smother and decay unless the mulch is partially removed from above the plants. A favorite means of meeting such a situation is to go along and shake up the mulch so that air may circulate beneath it. Of course the plants probably will push through a light mulch without much difficulty.

A common rule is to remove the mulch as soon as the plants show signs of blanching and before any considerable blanching or yellowing has occurred. In doing this enough straw to insure clean berries should be left in the row. Finally it is possible to bring fully opened blossoms safely through quite a frost if the mulch is scattered lightly back over the rows until the cold "snap" is past.

Bob Lee says:

I won't be short on feed this winter —not with a Letz Roughage Mill to make my home-grown feed go farther.

PARTICULARLY in a lean year like this one will you appreciate the feed saved by a Letz Roughage Mill. Here is what it will do to make your feed supply last at least a third longer:

What a hundred thousand farmers say the Letz Roughage Mill will do

- 1 Increase the feeding value of home-grown crops a fourth to a half by recutting, grinding and mixing them into palatable, well-balanced rations.
- 2 Make home-grown feed go farther and save the expense of buying ready-mixed feeds.
- 3 Enable a farmer to feed a fourth to a half more stock on the same number of acres.
- 4 Reduce the cost of production of milk and meat 25 to 50 per cent and keep livestock healthier.
- 5 Cut the cost of farm work through fewer operations and less labor at feeding time.



1. Cuts, recuts, and grinds fodder and hay (stalks, stems, leaves and all) to make it more palatable. Livestock eat more and clean it up better.

2. Grinds grain to just the right size for stock to digest without waste. (Wheat ground by the Letz Mill makes just as good feed as corn.)

3. Thoroughly mixes the ground roughage and ground grain, with the addition of a concentrate, into a balanced ration—a money saving home-made ration as good as the ready-mixed feed you get in a bag at the store.

The Letz Roughage Mill does these three jobs all at once—does them quickly—even when operated by only one man. Or, if you like, it will do any one of these three jobs separately, or any two at a time.

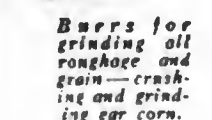
Pay for a Letz Mill this winter through lower cost of milk and meat production. With as few as 4 cows, or 20 steers, hogs or sheep, a Letz Mill makes more than it costs. Try the Letz Mill on your own farm and under your own special conditions. See your nearest Letz dealer or write us.

ALL IN ONE MACHINE

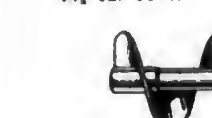
Cuts, grinds, mixes—does one at a time, does any two at a time or all three together.



Sharp knives for cutting and grinding of all kinds.



Bears for grinding all roughage and grain—cracking and grinding car corn.



Worm for mixing roughage and grain into a balanced ration.

LETZ
AMERICA'S LEADING
FEED MILL

LETZ MANUFACTURING COMPANY
1235 East Road, Crown Point, Indiana

FREE—The coupon below will bring you without cost our home-grown ration booklet. This booklet tells you how thousands of farmers are reducing costs with a Letz Roughage Mill. Mail coupon today.

LETZ MANUFACTURING COMPANY
1235 East Road, Crown Point, Indiana

Please send me your free booklet that shows how to turn home-grown crops into balanced rations for cattle, horses, hogs, sheep and chickens, and how thousands of farmers are profiting by using the Letz Roughage Mill. I am now feeding:

Dairy cows _____ Steers _____ Hogs _____ Sheep _____ Poultry _____

My name is _____

My mailing address (or R. F. D.) is _____

City _____ State _____



A great, responsible, successful, 40-year-old company now makes this surprising offer to honest men. Invest no money. Let us start you in this permanent business that YOU own and control for yourself.

WE FINISH the capital. You operate the business and take all of the profit for your self. Become the authorized McCann Dealer and handle the complete McCann line—the red tape and no division of line. We finance you. Show you how to make real money every day. Give you all the inside "tips" and "tricks" that it might take years to learn for yourself.

Only a Limited Number of Openings . . . Apply at Once

Only a certain number of these "no-investment" propositions are open. Each one offers a good thing with a chance to put some money in the bank every week. Honest, steady men who write promptly are assured of first consideration. Write today and ask for "no-investment" offer. Address: The House of Friendly Service.

McCann & Company,
Desk P-5312, Winona, Minn.



DRIVE CALKS

DIAMOND Drive Calk Shoes fit the average horse's hoof without alteration, or can be reshaped hot or cold.

DIAMOND Drive Calks are made from high carbon steel, hardened to give long wear. Guaranteed to fit shoe perfectly. Easily and quickly removed and replaced without resetting shoe. Give horses excellent footing when hard work is required. Ask your Blacksmith or Dealer for Diamond Shoes and Calks. If he cannot supply you write for Illustrated Catalog to

Diamond Calk
Horseshoe Company
4610 Grand Ave., Duluth, Minn.

SEND FOR FREE SAMPLE



World's Greatest Salve

We'll send a liberal Sample—FREE—to acquaint you with the amazing healing properties of this wonder ointment made from sheep's wool. CORONA gives quick relief for Cuts—Sores—Burns or any flesh wound on man or beast. Even stubborn cases of Eczema, Chapped Hands, Corns and Blisters often yield to its healing powers. For livestock troubles such as Sore Shoulders, Barb Wire Cuts, Caked Udders, etc.—CORONA has no equal. Send coupon today for FREE Sample.

GIVEN—DURHAM-DUPLEX Safety Razor

As an extra special offer we will also give everyone answering this ad a genuine Durham-Duplex Safety Razor who will send use to cover packing and mailing cost. Use coupon. Free Sample and Durham-Duplex Razor will be sent at once.

CORONA MFG. CO.
2819 Corona Bldg., Kenton, Ohio
I am sending for a sample of Corona Wool-Fat Ointment and Durham-Duplex Razor.

Name _____

Address _____

City _____ State _____

Zip _____

READ THE ADVERTISEMENTS TO RECOGNIZE PRODUCTS THAT ARE WORTHY OF YOUR CONFIDENCE

Farmer's Business Letter

THE hog market is closing about steady with a week ago in spite of the fact that the run at leading points is larger than last week. But last week was an unusually small week on account of the Thanksgiving holiday. The eleven market total for the week was 665,000 head, comparing with 779,600 a year ago and 821,000 two years ago. The average price for the week was \$8.20, five cents under last week and about a dollar under a year ago. Shipping demand is strong and the market is in a good healthy condition.

Trading picked up some in the futures market. Light hogs sold for January delivery at \$8.65; medium weights at \$9.15 for March delivery, and heavies at \$9 for March.

One of the Chicago buyers who has just returned from a trip around the market circle reports that the quality of hogs at other points is as good and weights are as uniform as at Chicago. Quality is unusually good.

Lambs Steady

Lambs worked up and down from day to day this week, but closed about steady with a week ago, which was a pretty good showing, considering the liberal run. Chicago had 94,800 sheep and lambs, against 85,000 last week and the same number a year ago. Top price on both natives and westerns was \$8.85, the same as last week. Sheep were a little lower, but there was not much change. Average price of lambs for the week was figured at \$7.85, the same as last week, but \$4.75 under a year ago.

Too Much Beef

Show stock and all, there was most too much beef on the market, and steer prices slumped 25 to 75 cents this week, with other kinds off nearly as much. Average steer price for the week was figured at \$10.50, against \$11.10 last week and \$12.75 a year ago. Top heavy steers brought \$13.50, 25 cents under last week, and top yearlings \$13.75, 50 cents under last week. There was too much choice beef in the exhibition. But in spite of these show offerings, the run on the open market was rather liberal, 56,600 here against 43,100 last week and 42,700 a year ago. The market was better than it was a week ago, but the prevailing opinion is that there will not be a very large supply of beef the coming winter, and with any improvement in general conditions prices should let the producers out whole, and may do better than that.

Show Stock Prices

Prices received for the fat stock offerings of the International were about in line with the market, that is lower than last year, and about as much lower as the general price decline. The 124 loads of fat cattle in the carlot show averaged \$15.30, against \$15.50 last year. The top of \$31 per cwt. compares with \$35 last year. The grand champion single steer brought \$250 a pound, this comparing with \$22.50 a year ago. The railroads were again good buyers of carlot show cattle, taking 24 loads, not quite as many as they have bought the past two years. Leading the railroad buying were the New York Central and the Pennsylvania, with seven loads each. The champion load of hogs in the show, Hampshire exhibited by J. M. Ballard of Indiana, brought only \$11.25, the lowest price since 1923. The top load of lambs, shown by R. McEwen of Ontario, sold at \$21, this price comparing with \$32.50 last year.

In addition to the railroads as buyers of show beef were hotels scattered all the way from Chicago to Boston, and steamship lines, the latter a new factor in the sale. Three bought to supply their ships soon to go on cruises, and it is doubtful the beef will be well advertised by them.

Quiet Grain Trade

The grain trade was quiet as usual this week, with small net gains in all three of the principal cereals. There is some indication of more optimism with respect to the world situation, but the trade cannot enthuse over domestic markets in view of our large premium over foreign markets. The Farm Bureau Agency is reported to have orders in the market nearly every day, on both sides. The purpose, apparently, is to curb any advance of consequence for the present and to keep wheat prices right around the present level. Russian wheat continues as a factor in foreign markets even though exports from that country have fallen off. However, a large part of Russian

shipments are said to have arrived in England unsold, and this means that this wheat is still a factor in the trade from day to day. It is not thought that price cutting will have any appreciable effect on European consumption, so it is condemned by those who have an interest at stake, but it is likely to continue as long as there is sharp competition for an outlet. The country is not selling corn liberally because it is more profitable to feed.

Chicago, Dec. 6, 1930 Watson

Produce Market Review

THE Philadelphia egg market was steady at the close of the week after a two weeks' period of serious weakness and uncertainty. During that period prices on fancy quality fresh eggs declined 15¢/16¢ from the high point reached November 17th. Most of the decline came during the period under review.

The combined effect of several conditions tended to bring about the decline. Receipts and supplies of Pacific Coast and nearby white eggs were in excess of the demand and dealers were forced to carry considerable stocks over. In an effort to stimulate buying, dealers were inclined to shade prices. Despite the lower price levels trading continued discouraging and on Wednesday a 5¢/6¢ decline occurred which was followed on Thursday by a similar drop. At the low level dealers

LIVESTOCK

PITTSBURGH

Cattle

Supplies continue light, only 40 carloads being offered on Monday. All classes of steers were higher but the quality of the best was better than a week ago. Charley Coast of Ravenswood, W. Va., marketed 100 head of Hereford steers, 325 days old and weighing 850 lbs. at \$14. This was the only one of Christmas quality on the market. Several carloads of yearlings brought \$10.10, the latter being paid for two carloads averaging 940 lbs. and showing good finish. A few not so well finished went at \$10.10 to 10.25 and some good heavy butchers here brought \$9.75 and good yearlings of 1,100 lbs. or over went at \$9.25 to \$9.50 with fair heavy weights at \$8.50 to \$9 and useful light killers at \$8 to \$8.25. Coarse heavy steers were hard to sell but many were offered. Heifers were stronger, a few good ones selling at \$9, but no carlots were on sale. Fat cows were firmer with \$8 virtually the outside figure though some nice young cows brought \$7.75 to \$8.25, largely \$3 per cwt. A few choice butcher bulls brought \$7, while many \$5.50 to \$6 and common around \$5. Nothing was sold to go to the country.

Choice steers \$10 00 to 10 50
Good to choice 9 50 to 10 00
Fair to good 8 00 to 9 50
Plain heavy steers 8 00 to 9 50
Good to choice yearlings 10 00 to 11 00
Good butcher steers, 1,000 to 1,150 lbs. 9 00 to 9 50
Fair to good, do. 8 00 to 9 00
Ordinary to fair, do. 7 50 to 8 50
Common, do. 6 50 to 7 50
Good light butcher steers 8 00 to 9 50
Fair to good light steers 7 00 to 8 50
Common to medium, do. 6 00 to 7 50
Inferior light steers 5 00 to 6 50
Feeders Nominal
Stockers 8 00 to 8 50
Choice fat heifers 7 50 to 8 00
Good to choice heifers 6 50 to 7 50
Common to fair heifers 5 50 to 6 50
Choice fat cows 5 00 to 6 50
Good to choice fat cows 4 50 to 5 50
Common to fair cows 3 50 to 4 50
Fair to good cows 3 00 to 4 00
Canners 2 50 to 3 50
Fresh cows, calf at side 4 00 to 5 00
Choice heavy bulls 6 50 to 7 50
Good heavy butcher bulls 6 50 to 7 50
Good light bulls 5 50 to 6 50
Fair to good bulls 5 00 to 6 00
Common to fair bulls 4 00 to 5 00
Inferior bulls 3 00 to 4 00

Hogs

Receipts were liberal and the market lower last week, closing at \$8.40 to \$8.60. Monday's supply was 23 double-deck carloads, nine carloads holding over from last week. The trade was active at 20¢ advance. Bulk of good heavy and light hogs brought \$8.80, several decks \$8.55. Heavy hogs were rather slow at \$8.50 to \$8.60. Not many pigs coming and good ones sold at top figures or close to them. Sows sold largely at \$7.25 to \$7.50, and pigs at \$5.50 to \$6.00.

Heavy \$8 50 to 8 60
Heavy mixed 8 50 to 8 60
Medium wts. (180-200 lbs.) 8 50 to 8 60
Heavy Yorkers, 125-150 lbs. 8 50 to 8 60
Light Yorkers, 125-150 lbs. 8 50 to 8 60
Pigs, 90-100 lbs. 7 50 to 8 50
Boroughs 7 00 to 7 50
Stags 5 00 to 5 50

Sheep and Lambs

Last week's lamb market closed at \$5.75 for good handweights, Monday's receipts were about 18 double-deck carloads. Sheep were scarce and firmer at \$4.45 to \$4.75 for good heavy weights. Lambs were a quarter or so lower but demand was rather broad at the prices—an \$8.50 basis for handweights, with good culls \$7.75 to \$8 and others \$7.50 to \$8. Quality of the lambs was right good, and both lamb and hog feeders report the use of considerable quantities. While there is a shortage of corn this year the feeding quality is very good.

Good to best wethers \$4 00 to 4 25
Good mixed 3 50 to 4 00
Fair to good, do. 3 00 to 3 25
Common to fair 2 00 to 3 00
Inferior sheep 1 00 to 2 00
Good to choice lambs 8 25 to 8 50
Medium 5 00 to 7 25
Culls and common, do. 5 00 to 6 50

Calves

With about 700 on sale best veal calves went at \$12.50, seconds \$9 to \$10 and others \$5 to \$8.

LANCASTER

Cattle

Lancaster, Dec. 8.—Receipts amounted to 1,325 head. The market was generally dull. Best steers and yearlings sold at about steady prices, bulk going at \$9.00. Good medium weight steers sold at \$9.25 and some were held higher. Bulls and she-goats were steady, stockers and feeders steady. The latter range from \$5.25 to \$9.

About 125 calves were on sale. The market was steady, best vealers selling at \$13.50.

Medium to good steers, 900 to 1,100 lbs. \$5 00 to 10 25
Good to choice steers, 1,100 to 1,300 lbs. 8 50 to 10 25
Good heavy steers 9 25 to 10 25
Good to choice heifers 6 75 to 8 75
Common to medium 5 00 to 6 75
Good to choice cows 5 00 to 6 75
Common to medium 3 75 to 5 00
Canners and butchers 5 00 to 6 75
Good to choice bulls 6 75 to 8 50
Common to medium 5 00 to 6 75
Stockers and feeders 5 25 to 9 00

Hogs

Fourteen hundred head of hogs were offered. Market steady to weak. Good hogs in the 180 to 250 lb. class brought \$10, good and choice (180-250 lbs.) \$9.25 to \$9.75. Good and choice (180-250 lbs.) \$9.25 to \$9.75. Good and choice (250-350 lbs.) \$9.25 to \$9.75. Parking sows 9 25 to 9 75

CHICAGO

Cattle

Chicago, Dec. 8.—Today's receipts were 15,000 head. Best kinds scarce and strong, others weak to 25¢ lower. Top yearlings brought \$13.35, while the bulk of steers sold at \$9 to \$12.50.

Hogs \$8 50 to 8 60
Heavy mixed 8 50 to 8 60
Medium wts. (180-200 lbs.) 8 50 to 8 60
Heavy Yorkers, 125-150 lbs. 8 50 to 8 60
Light Yorkers, 125-150 lbs. 8 50 to 8 60
Pigs, 90-100 lbs. 7 50 to 8 50
Boroughs 7 00 to 7 50
Stags 5 00 to 5 50

Sheep

Twenty thousand head were offered. The market was steady with top at \$8.85. Bulk of lambs sold at \$7.25 to \$8.25. Feeders generally brought \$7.50.

The indications point to more liberal offerings of turkeys for the Christmas market than were available at Thanksgiving. The unseasonable warm weather and the low prices which were being offered at the larger shipping points were responsible for many turkeys being held back in hopes of a more favorable market at Christmas. The demand for turkeys was surprisingly good and all expectation. It is likely that this was due chiefly to the low retail prices which prevailed.

Butter Improves

The butter market showed considerable improvement during the week as prices of 92-score butter advanced about one and a half cents at most markets. Both buyers and sellers showed more confidence and supplies of fancy fresh stock were well cleared up.

The potato markets throughout the country improved during the past week with prices advancing around 10¢/15¢ per 100 pounds in most cities. Farmers and dealers are wondering whether this gain was permanent or temporary.

Prices are lower than in other years when the crop was larger and it may be that these underlying conditions are beginning to take effect. Total shipments of late crop potatoes are a little lighter this season and the current rate of shipment is less than in early December last year. Pennsylvania round whites are selling chiefly at \$1.50 to \$1.75 per 100-pound sack with well graded fancy stock up to \$1.75. Maine Green Mountains jobbed at \$2.25 per 100-pound sack.

Apples Steady

The apple markets were steady during the week and prices of the popular varieties have made some slight gains. The best Eastern apples have sold within a range from \$1.00 to \$1.25 per bushel in Philadelphia. New York, Baltimore and Washington. Shipments of apples have been decreasing and a large part of the output of the Eastern producing sections continues to go to the export trade.

Cabbage and onion prices have gained somewhat with the coming of colder weather. Growers in New York state were receiving \$10 to \$12 bulk ton. A few cars have been shipped from Pennsylvania and some Pennsylvania stock was reported in Washington this week at \$1.40 per 100-pound sack. Onion prices are now mostly around \$1.15 to \$1.35 per 100-pound sack. Sweet potatoes also showed some improvement early in the week but late in the week there was a corresponding decline.

WOOL MARKET

Boston, Dec. 8.—The situation in the wool market has shown no material change from the dullness that has prevailed several weeks, says the U. S. Department of Agriculture Market News Service. Manufacturers have been in the market looking over the offering during the past week but the actual business transacted was very limited in volume. The bulk of the business was on the finer grades, including half-blood and above. Quotations have been steady to slightly easier.

Domestic Wool Quotations

Grease Basis, Ohio and Similar

61s, 70s, 80s (fine) strictly combing 20 00 to 22 00
61s, 70s, 80s (fine) strictly combing 20 00 to 22 00
61s, 70s, 80s (fine) strictly combing 20 00 to 22 00
61s, 70s, 80s (fine) strictly combing 20 00 to 22 00
61s, 70s, 80s (fine) strictly combing 20 00 to 22 00
61s, 70s, 80s (fine) strictly combing 20 00 to 22 00
61s, 70s, 80s (fine) strictly combing 20 00 to 22 00
61s, 70s, 80s (fine) strictly combing 20 00 to 22 00
61s, 70s, 80s (fine) strictly combing 20 00 to 22 00
61s, 70s, 80s (fine) strictly combing 20 00 to 22 00

DAIRYMEN'S LEAGUE PRICES

New York, Dec. 8.—A report from the Dairy Men's League of New York City, which has been in the market for some time, has been received. The report shows that the market for dairy products is generally steady, with some improvement in the price of milk and cream.

DRESSED CARCASS CHAMPIONS

Championships in the dressed carcass contest at this year's International was won by a steer, Univ. of Wisconsin, which weighed 1,300 lbs. and brought \$10.00. The runner-up was a steer, Univ. of Wisconsin, which weighed 1,200 lbs. and brought \$9.50. The third place was won by a steer, Univ. of Wisconsin, which weighed 1,100 lbs. and brought \$9.00.

HAY MARKET REVIEW

Hay markets continued quiet during the week ending December 8th. The U. S. Department of Agriculture Market News Service reports that the market for hay is generally steady, with some improvement in the price of alfalfa and clover.

CHICAGO CASH GRAIN

Chicago, Dec. 8.—The following cash grain prices were reported today: No. 1 hard wheat, \$2.00; No. 2 hard wheat, \$1.95; No. 3 hard wheat, \$1.90; No. 1 soft wheat, \$1.85; No. 2 soft wheat, \$1.80; No. 3 soft wheat, \$1.75.

Produce Quotations

PHILADELPHIA
Higher than extras, 37¢/40¢; extra firsts, 38¢; 90 score, 32¢; extra firsts, 37¢; second, 25¢/27¢.
Live fowls, 13¢/26¢; broilers, 14¢/27¢; old roosters, 15¢/18¢; pigeons, 25¢/32¢.
Ducks, 15¢/18¢; turkeys, 25¢/32¢.
APPLES, Pa. & N. J., bu. bskts., \$1.01 to \$1.25; CRANBERRIES, N. J., 14 bbl. crates, early varieties, 37¢/40¢.
BEETS, Pa. & N. J., 1/2 bu. bskts., \$1.01 to \$1.25; CARROTS, N. J., 100 lb. bskts., \$1.01 to \$1.25; CABBAGE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; CELERY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SPINACH, Pa. & N. J., bu. bskts., \$1.01 to \$1.25; TOMATOES, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; PEPPERS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; ONIONS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; POTATOES, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SWEET POTATOES, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; CUCUMBERS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; EGGS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; BUTTER, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; MILK, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; CREAM, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; ICE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; COAL, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; LUMBER, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; BRICK, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; CEMENT, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; GLASS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; PAINT, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; OIL, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; FUEL, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; FERTILIZER, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SEED, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; FEED, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SOYBEANS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; CORN, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; WHEAT, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; RYE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; BARLEY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; OATS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SUGAR, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SALT, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SOAP, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; CLOTH, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SHOES, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; CLOTHING, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; FURNITURE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; APPLIANCES, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; TOYS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; BOOKS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; MUSIC, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; ARTS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; CRAFTS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; GARDEN, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SPORTS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; TRAVEL, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; EDUCATION, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; HEALTH, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; BEAUTY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; HOME, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; BUSINESS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; INDUSTRY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SCIENCE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; LITERATURE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; HISTORY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; GEOGRAPHY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; POLITICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; ECONOMICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SOCIOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; PSYCHOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; PHILOSOPHY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; THEOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; RELIGION, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; ETHICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; AESTHETICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; LOGIC, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; METAPHYSICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SCIENCE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; LITERATURE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; HISTORY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; GEOGRAPHY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; POLITICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; ECONOMICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SOCIOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; PSYCHOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; PHILOSOPHY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; THEOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; RELIGION, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; ETHICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; AESTHETICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; LOGIC, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; METAPHYSICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SCIENCE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; LITERATURE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; HISTORY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; GEOGRAPHY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; POLITICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; ECONOMICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SOCIOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; PSYCHOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; PHILOSOPHY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; THEOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; RELIGION, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; ETHICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; AESTHETICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; LOGIC, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; METAPHYSICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SCIENCE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; LITERATURE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; HISTORY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; GEOGRAPHY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; POLITICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; ECONOMICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SOCIOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; PSYCHOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; PHILOSOPHY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; THEOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; RELIGION, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; ETHICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; AESTHETICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; LOGIC, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; METAPHYSICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SCIENCE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; LITERATURE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; HISTORY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; GEOGRAPHY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; POLITICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; ECONOMICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SOCIOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; PSYCHOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; PHILOSOPHY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; THEOLOGY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; RELIGION, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; ETHICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; AESTHETICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; LOGIC, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; METAPHYSICS, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; SCIENCE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; LITERATURE, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; HISTORY, Pa. & N. J., 100 lb. bskts., \$1.01 to \$1.25; GEOGRAPHY, Pa. & N. J., 100 lb. bskts.,

and 5, Purdue Univ.; 2 and 3, Pennsylvania State College.
Barrows, 280-350 lbs. (12 shown): 1, Purdue Univ.; 2 and 5, Kansas State Agricultural College, Manhattan, Kansas; 3, Iowa State College; 4, Pennsylvania State College.

Pen of barrows, 200-240 lbs. (9 shown): 1, Purdue University; 2, Iowa State College; 3, Pennsylvania State College; 4 and 5, J. H. Nickel & Sons, Arenzville, Ill.

Pen of barrows, 240-280 lbs. (6 shown): 1, Purdue University; 2, Pennsylvania State College; 3, Kansas State Agricultural College; 4, J. H. Nickel & Sons.

Five barrows; any weight as above (5 shown): 1, Purdue University; 2, Pennsylvania State College; 3, Iowa State College; 4 and 5, J. H. Nickel & Sons.

Champion barrow: Purdue University.
Reserve champion: Iowa State College.
Champion pen of barrows: Kansas State Agricultural College.

Reserve champion pen: Purdue University.

POLAND-CHINAS

Judge.—Burle Dobson, Lancaster, Wis.
Barrows, 280-350 lbs. (21 shown): 1, University of Wisconsin; 2, University of Minnesota; 3 and 4, University of Illinois; 5, Columbian Stock Farm, Grandview, Mo.

Barrows, 240-280 lbs. (34 shown): 1 and 5, Purdue Univ.; 2, Kansas State Agricultural College; 3 and 4, University of Wisconsin.

Barrows, 280-350 lbs. (29 shown): 1 and 4, Purdue University; 2, Iowa State College; 3, University of Minnesota; 5, University of Wisconsin.

Pen of barrows, 200-240 lbs. (7 shown): 1, University of Minnesota; 2, University of Wisconsin; 3, University of Illinois; 4, Columbian Stock Farm; 5, Iowa State College.

Pen of barrows, 240-280 lbs. (11 shown): 1, Purdue University; 2, Kansas State Agricultural College; 3, University of Wisconsin; 4, University of Minnesota; 5, Columbian Stock Farm.

Barrows, any weight (5 shown): 1, Purdue University; 2, University of Wisconsin; 3, Columbian Stock Farm; 4, University of Minnesota; 5, Iowa State College.

Champion Barrow: Purdue University.
Reserve: Iowa State College.
Champion pen of barrows: Purdue University.
Reserve: Purdue University.

CHESTER WHITES

Judge.—Arthur Tomson, Wabash, Ind.
Barrows, 280-350 lbs. (23 shown): 1, 2 and 3, Purdue University; 4, Albert H. Stuart; 5, Kansas State Agricultural College.

Barrows, 240-280 lbs. (23 shown): 1, 2 and 3, Purdue University; 4, Albert H. Stuart; 5, Kansas State Agricultural College.

Barrows, 280-350 lbs. (24 shown): 1, Purdue University; 2 and 3, Ohio State University; 4, Albert H. Stuart; 5, University of Minnesota.

Pen of barrows, 200-240 lbs. (8 shown): 1, Purdue University; 2, Albert H. Stuart; 3, University of Illinois; 4, University of Wisconsin; 5, Oklahoma A. & M. College.

Pen of barrows, 240-280 lbs. (9 shown): 1, Purdue University; 2, University of Minnesota; 3, Albert H. Stuart; 4, Kansas State Agricultural College; 5, Ohio State University.

Pen of barrows, 280-350 lbs. (8 shown): 1, Ohio State University; 2, Purdue University; 3, University of Illinois; 4, Albert H. Stuart; 5, University of Wisconsin.

Barrows, any weight as above (8 shown): 1, Purdue University; 2, Albert H. Stuart; 3, University of Illinois; 4, University of Wisconsin; 5, Oklahoma A. & M. College.

Ten barrows, 200-240 lbs. (2 shown): 1, Iowa State College; 2, H. H. Yohe.

Champion barrow: Albert H. Stuart.
Reserve champion barrow: Purdue University.
Champion pen of barrows: Purdue University.
Reserve champion pen of barrows: Ohio State University.

DURO-JERSEYS

Judge.—Henry W. Matern, Lottant, Ill.
Barrows, 280-350 lbs. (22 shown): 1, Clement Bros., Cold Spring Farm, Mundelein, Ill.; 2 and 4, University of Illinois; Urbana, Ill.; 3, Oklahoma A. & M. College; 5, Iowa State College.

Barrows, 240-280 lbs. (25 shown): 1, Iowa State College; 2, Ohio State University; 3 and 5, University of Illinois; 4, University of Minnesota.

Barrows, 280-350 lbs. (28 shown): 1, Purdue University; 2, Iowa State College; 3, Ohio State University; 4, General Spross, Brook, Ind.; 5, Kansas State Agricultural College.

Pen of barrows, 200-240 lbs. (7 shown): 1, University of Illinois; 2, Oklahoma A. & M. College; 3, Iowa State College; 4, University of Minnesota; 5, Ohio State Univ.

Pen of barrows, 240-280 lbs. (9 shown): 1, Iowa State College; 2, Ohio State University; 3, University of Illinois; 4, University of Minnesota; 5, Oklahoma A. & M. College.

Pen of barrows, 280-350 lbs. (9 shown): 1, Purdue University; 2, Ohio State University; 3, Ohio State University; 4, University of Minnesota; 5, Kansas State Agricultural College.

Get of one sire (7 shown): 1, University of Minnesota; 2, Iowa State College; 3, University of Illinois; 4, Oklahoma A. & M. College.

Ten barrows (2 shown): 1, University of Illinois; 2, Iowa State College.

Champion barrow: Purdue University.
Reserve: Iowa State College.
Champion pen of barrows: Purdue University.
Reserve: University of Illinois.

SPOTTED POLAND-CHINAS

Judge.—W. W. Smith, Lafayette, Ind.
Barrows, 280-350 lbs. (7 shown): 1, Oklahoma A. & M. College; 2, The Wilt Farms, Hillsboro, Ind.; 3 and 5, Iowa State College; 4, Oklahoma A. & M. College.

Barrows, 240-280 lbs. (6 shown): 1, Oklahoma A. & M. College; 2, 3 and 5, The Wilt Farms; 4, Oklahoma A. & M. College.

Barrows, 280-350 lbs. (7 shown): 1, 3 and 4, Iowa State College; 2 and 5, Kansas State Agricultural College.

Pen of barrows, 200-240 lbs. (2 shown): 1, Oklahoma A. & M. College; 2, Iowa State College.

Pen of barrows, 240-280 lbs. (2 shown): 1, The Wilt Farms; 2, Oklahoma A. & M. College.

Pen of barrows, 280-350 lbs. (2 shown): 1, Iowa State College; 2, Kansas State Agricultural College.

Get of one sire, any weight (3 shown): 1, Iowa State College; 2, The Wilt Farms; 3, Oklahoma A. & M. College.

Champion barrow: Iowa State College.
Reserve: Oklahoma A. & M. College.
Champion pen: Iowa State College.
Reserve: The Wilt Farms.

LARGE YORKSHIRES

Judge.—Arthur L. Anderson, Ames, Ia.
Barrows, 170-210 lbs. (11 shown): 1, University of Wisconsin; 2, B. F. Davidson.

Barrows, 280-350 lbs. (29 shown): 1 and 4, Purdue University; 2, Iowa State College; 3, University of Minnesota; 5, University of Wisconsin.

Pen of barrows, 200-240 lbs. (7 shown): 1, University of Minnesota; 2, University of Wisconsin; 3, University of Illinois; 4, Columbian Stock Farm; 5, Iowa State College.

Pen of barrows, 240-280 lbs. (11 shown): 1, Purdue University; 2, Kansas State Agricultural College; 3, University of Wisconsin; 4, University of Minnesota; 5, Columbian Stock Farm.

Barrows, any weight (5 shown): 1, Purdue University; 2, University of Wisconsin; 3, Columbian Stock Farm; 4, University of Minnesota; 5, Iowa State College.

Champion Barrow: Purdue University.
Reserve: Iowa State College.
Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

Champion pen of barrows: Purdue University.
Reserve: Purdue University.

1, Purdue University; 2, Big Four Farms; 3, University of Wisconsin; 4, Columbian Stock Farm; 5, Iowa State College.
Ten barrows, 200-240 lbs. (3 shown): 1, Iowa State College; 2, Simon C. Moore, Towanda, Ill.; 3, Frank C. Oren, Wilmington, Ohio.
Champion barrow: J. M. Ballard, Reserve: Purdue University.
Champion pen of barrows: Purdue University.
Reserve: Purdue University.

TAMWORTHS

Judge.—I. M. Reed, Oskaloosa, Iowa.
Barrows, 170-210 lbs. (9 shown): 1, 3 and 5, Iowa State College; 2 and 4, Emerson Littlejohn, Christiansburg, Ohio.

Barrows, 210-250 lbs. (9 shown): 1, Emerson Littlejohn; 2, 3 and 5, Iowa State College; 4, Fox Chemical Company, Des Moines, Iowa.

Pen of barrows, 170-210 lbs. (4 shown): 1, Iowa State College; 2, Emerson Littlejohn; 3 and 4, Fox Chemical Company.

Pen of five barrows, produce of one sow: 1, Emerson Littlejohn; 2, Fox Chemical Company.

Pen of five barrows, get of one sire: 1, Iowa State College; 2, Emerson Littlejohn; 3, Fox Chemical Company.

Ten barrows, 170-250 lbs.: 1, Fox Chemical Company.
Champion barrow: Emerson Littlejohn.
Reserve: Iowa State College.
Champion pen of barrows: Iowa State College.
Reserve: Iowa State College.

CARLOAD LOTS SWINE

Judge.—Howard Turner, Chicago, Ill.
Number shown—24 carloads.
Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

Carload, 150-200 lbs. (2 shown): 1, A. Rexroat, Jacksonville, Ill., on Hampshires; 2, Schilling Bros., Apple River, Ill., on Duroc-Jerseys.

College; 5, Ohio State University.
Wether lambs (24 shown): 1 and 4, University of Minnesota; 2 and 3, University of Kentucky; 5, Kansas State Agricultural College.

Champion wether: University of Minnesota.
Reserve champion: Michigan State College.

Pens of lambs (7 shown): 1, University of Minnesota; 2, University of Kentucky; 3, Chase Brothers, Willow Lake, S. D.

SOUTHDOWNS

Judge.—E. L. Shaw, Ashley, Ohio.
Yearling wethers (24 shown): 1, University of Kentucky; 2 and 3, Iowa State College; 4, Oklahoma A. & M. College; 5, Mountain Farm, Bradstreet, Mass.

Wether lambs (27 shown): 1 and 2, Purdue University; 3, Kansas State Agricultural College; 4, Helms Brothers, University of Kentucky.

Champion wether: Purdue University.
Reserve champion: University of Kentucky, Lexington, Ky.

Pen of lambs (6 shown): 1, Purdue University; 2, Kansas State Agricultural College; 3, University of Minnesota.

OXFORDS

Judge.—Gavin McKerron, Pewaukee, Wis.
Yearling wethers (6 shown): 1, Oklahoma A. & M. College; 2 and 3, Iowa State College; 3, Allendale Farm, Lake Villa, Ill.; 4, Michigan State College.

Wether lambs (13 shown): 1, Allendale Farm; 2 and 3, O. R. Quakenbush, Appleton, Ind.; 4, Michigan State College; 5, O. R. Quakenbush.

Champion wether: Oklahoma A. & M. College.
Reserve champion: Allendale Farm.

Pen of wether lambs (4 shown): 1, O. R. Quakenbush; 2, Michigan State College; 3, Iowa State College; 4, Chase Brothers, Willow Lake, S. D.

LINCOLNS

Judge.—M. Thornton, Lansing, Mich.
Yearling wethers (13 shown): 1 and 2, H. W. Lee, Highgate, Ont., Can.; 3, R. Robson & Son, Denfield, Ont., Can.

Wether lambs (9 shown): 1 and 2, William Goddard, Denfield, Ont., Can.; 3, H. W. Lee; 4, R. S. Robson & Son; 5, H. W. Lee.

Champion wether: H. W. Lee, Highgate, Ont., Can.
Reserve champion: William Goddard, Denfield, Ont., Can.

Pen of wether lambs (3 shown): 1, William Goddard; 2, H. W. Lee; 3, R. S. Robson & Son.

COTSWOLDS

Judge.—M. Thornton, Lansing, Mich.
Yearling wethers (1 shown): Charles J. Shore, Glanworth, Ont., Can.

Wether lambs (6 shown): 1, 2 and 3, Charles J. Shore; 4 and 5, H. T. Crandall & Son, Cass City, Mich.

Champion wether: Charles J. Shore, on yearling.
Reserve champion: Charles J. Shore, on yearling.

Pen of wether lambs (2 shown): 1, Charles J. Shore; 2, H. T. Crandall & Son.

CHEVIOTS

Judge.—P. C. MacKenzie, State College, Pa.
Yearling wethers (7 shown): 1, 3 and 4, University of Kentucky; 2, Keith Clark, Clark's Hill, Ind.

Wether lambs (7 shown): 1, 2, 3 and 4, University of Kentucky; 5, Keith Clark.

Champion wether: University of Kentucky, on lamb.
Reserve champion: University of Kentucky, on lamb.

DORSETS

Judge.—P. C. MacKenzie, State College, Pa.
Yearling wethers (6 shown): 1 and 2, Fillmore Farms, Inc., Bennington, Vt.; 3, Kansas State Agricultural College; 4, Oklahoma A. & M. College; 5, Michigan State College.

Wether lambs (12 shown): 1, Kansas State Agricultural College; 2, Oklahoma A. & M. College; 3, 4 and 5, Fillmore Farms, Inc.

Champion wether: Kansas State Agricultural College.
Reserve champion: Fillmore Farms, Inc.

Pen of lambs (4 shown): 1, Fillmore Farms, Inc.; 2, Oklahoma A. & M. College; 3, Michigan State College; 4, Chase Brothers, Willow Lake, S. D.

RAMBOUILLETS

Judge.—H. Noel Gibson, Kankakee, Ont., Can.
Yearling wethers (3 shown): 1, University of Illinois; 2 and 3, Oklahoma A. & M. College.

Wether lambs (13 shown): 1, University of Illinois; 2, Purdue University; 3, Michigan State College; 4 and 5, Oklahoma A. & M. College.

Champion wether: University of Illinois, on lamb.
Reserve champion: University of Illinois, on lamb.

Pen of wether lambs (4 shown): 1, Purdue University; 2, Michigan State College; 3, Oklahoma A. & M. College; 4, Maurice I. Peterson, Whitewater, Wis.

FAT GRADE AND CROSS-BRED SHEEP
MEDIUM WOOL OR DOWN TYPES

Judge.—H. Noel Gibson, Kankakee, Ont., Can.
Yearling wethers (19 shown): 1, Iowa State College; 2, University of Kentucky; 3 and 4, Chase Brothers, Willow Lake, S. D.

(Continued on page 21)

Lessons from European Pasture Management

(Continued from page 5.)

possible to raise the protein content of the pasture grass to as much as 25 per cent on the dry basis provided the grass was liberally fertilized with nitrogen and harvested at an immature stage, so it developed into merely a problem of so managing the grazing as to have the grass grazed at an immature stage instead of becoming overly mature and stemmy, and of keeping up through the season a continuous supply of grass at the right stage for grazing. (Having a liberal supply of grass at its maximum palatability and nutritive value available at all times so that grazing animals can eat their fill with the minimum expenditure of energy is an essential part of the scheme.)

Dr. Warmbold hit on the plan of dividing the pasture into several—usually at least five—approximately equal areas, grazing them in rotation and making two or three applications of high nitrogen fertilizer during the season. As might be expected it soon developed that an acreage which provided just enough pasturage at the time of greatest natural growth proved quite insufficient in the hotter, drier weather of late summer.

A Good Meadow Seeded in 1886

FOR MORE THAN THIRTY YEARS THIS RED BALL HAS BEEN YOUR ASSURANCE OF "MORE DAYS WEAR"

250 PRIZES

for "Way-Back" Memories

HERE'S your chance to win two pairs of Ball-Band rubber footwear—your own selection. 200 pairs will be given for the best letters of early experiences with Ball-Band. 50 additional pairs will be given for the best photographs taken on the farm twenty or more years ago. Search your memory for a prize-winning letter—and the family album for a picture. This offer expires March 31, 1931. Tear off the Red Ball trade-mark below and send it in with your letter.



Some where in your family album—or in a forgotten box of snapshots—the attic—maybe you find prize winning pictures like these.

Do you remember the days of "puffed" sleeves and long, full skirts? Perhaps it was then you bought your first Ball-Band footwear.

Search among "way back" memories

—for prize winning letters and pictures



MANY of you learned about Ball-Band footwear from your fathers—many more learned for yourselves. . . . Until today more than ten million of you buy Ball-Band from over 70,000 dealers in this country.

Can you remember the first time you saw the Red Ball trade-mark on a pair of boots? Perhaps it was as much as thirty years ago when you or your father bought the first pair, and you learned that the Red Ball trade-mark was a guarantee of more days wear and built-to-the-foot comfort in rubber footwear.

Search your "way-back" memories—and let us have a prize-winning letter about your first acquaintance with Ball-Band. Where's that family album? Probably you'll find a snapshot of early days on the farm. There are special extra prizes for the best photographs taken twenty

or more years ago. (All pictures—including prize winners—will be returned if requested.)

Year after year our skilled craftsmen have met your footwear needs with better quality always at reasonable prices. Today the Red Ball trade-mark brings you that natural, light on-the-foot feeling you want in modern footwear. Yet the live, tough rubber in them wears longer than it's reasonable to expect.

We prepare rubber for but one purpose—the making of quality footwear. We've developed many special compounds—for the heel, for the sole, for the toe. The stout linings and fabrics you see in Ball-Band are knit in our own factory. Each part, rubber or fabric, is selected for the particular job it must do, adding to that plus wear you have learned to expect of Ball-Band.

Your entire family's needs are cared for in our full line of over 800 items, including Mishko-sole leather work shoes. There's a Ball-Band dealer near you. If you do not know his name, write us. And remember to look for the Red Ball trade-mark.

MISHAWAKA RUBBER & WOODEN MFG. CO.
484 Water Street, Mishawaka, Indiana

Look for the Red Ball

BALL BAND

Built-to-the-foot

BOOTS • RUBBERS • ARCTICS • GALOSHES • CANVAS SPORT SHOES
LEATHER WORK SHOES • WOOL BOOTS AND SOCKS

Ball-Band galoshes will hold their neat, erect shape throughout the season. All are "staked to the shoe" for dainty, snug fit and smart appearance by our Style Committee. At the upper left is the "light-as-a-feather", all-rubber Saxon.

Light weight rubbers made by Ball-Band fit snugly, smartly. They're so light you hardly know you have them on, yet they are made of live, firm, tough rubber that will give surprisingly long wear.

Ball-Band Arctics are built to welcome punishment. Reinforced at every point with live, tough rubber. Cloth Arctics for cold and snow, and all-rubber styles for mud and wet.

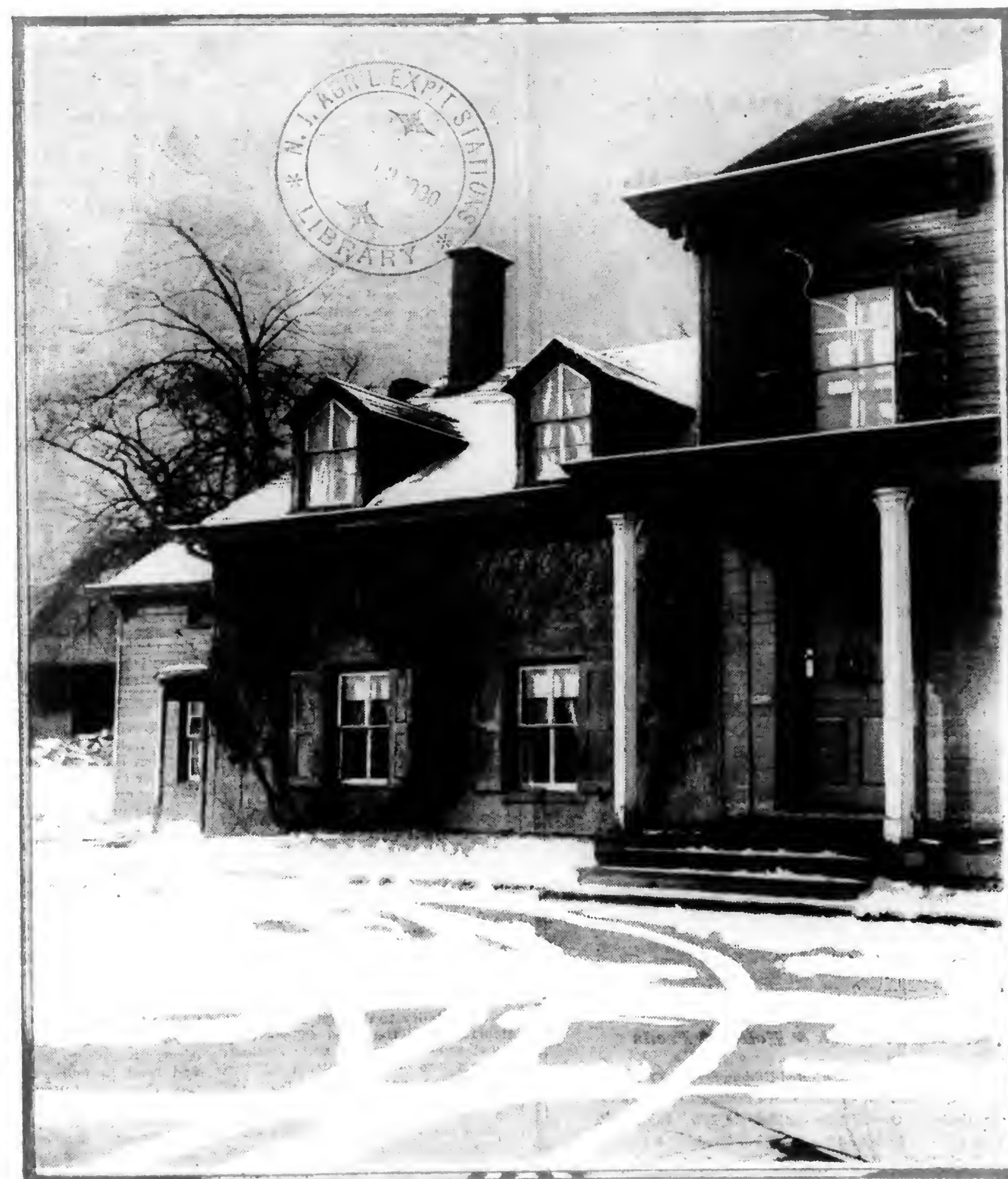
PENNSYLVANIA FARMER

Published Weekly

Established 1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

December 20, 1930



Boyhood Home of Clement Moore, Author of "The Night Before Christmas"

Philadelphia

Pittsburgh

Harrisburg

Farm Facts and Fancies

By ALVA AGEE

THOUGHTFUL people are eager for more good-will in the world. The situation is pathetic. In the last quarter of a century we have devised the means for wholesale destruction of life and property by any nation that may become irritated. Old safeguards offer protection to the great mass of humanity that stays right-minded from natural inclination. On a smaller scale it is true within the boundaries of any one country.

A great sum of money is being quietly spent by many organizations and individuals to take away the basis for misunderstandings. Their plan is to cause nations and groups within nations to know each other better—to know their problems, their difficulties, their aims and the absence of any true ground for hatred. This educational movement in all its forms is a huge enterprise.

Running through all this effort is the conviction that most human beings would be fair-minded if they had facts on which to base their thinking, and that misunderstanding lies under ill-will. These people believe that if human beings were well acquainted they would find far less in each other to hate. They hold that this is true for peoples separated by national boundaries and groups within a country that have seemingly different economic and social interests. Somebody should catalogue for our encouragement the quiet endeavors of all these organizations and individuals to promote good-will through better understanding.

Notwithstanding any present-day fears of the results of world unrest, the gain in good-will in our country, which we know best, has been extraordinary in the past quarter of a century. It takes a most practical form. Right now is the determination that people must not go hungry this winter. Instead of the old-time shutting-down of factories and strikes when profits disappear we have the determination of employers to carry on as far as possible and of men to share in part-time work so that more can have some income. This is only one example of the new spirit. Years ago the enactment of special legislation and the appropriation of hundreds of millions of dollars in an attempt to help out the farming industry would not have been given any consideration. I am not discussing the wisdom of anything done, but am illustrating the spirit of the times. We are supplanting antagonism with good-will of a definite, practical sort. Fail as we may in some efforts, there is the will to make the effort.

Coming down closer home, you and I may not have the money, the time nor the ability to do anything in particular along the lines followed by great associations but their methods interest me as recognition of two things: the enormous need in the world of good-will and the part misunderstanding plays in creating ill-will. I carry the truth into the small circle of my life and realize, then, that if there is some one I do not particularly like and I could know the burdens he carries and the thoughts he has when he is not dogged by disappointments and cares, he would appear more likeable and any ill-will would fade away.

This is easy to say and sometimes too hard to put into practice effectively.

One may plan all right in the morning, but if one has been letting some one get on his nerves, the nerves get the habit and the planning finds itself blown up. All I am trying to say is that the people who are working for better understanding and true acquaintance surely are on the right track, and some of us make a little headway now and then on that road.

Many people have many ways of reading their Bible, and they get many ideas of what it teaches, but it seems to me to make good-will a necessary footing for the climb upward that the human race must make if it is not to be a failure, and that could not be. One cannot say these things without having it sound as if he was trying to preach, when the fact is it is only a recognition of a truth that all of us have a partial grip upon. I should like to make a little more headway next year in a brand of good-will and in deep interest that others prosper. That is not difficult so far as most individuals are concerned because most people are likeable and need more than they have.



A liking for fair-play compels one to want to see most people make a winning. If we leave any one off the list, when we could come to see that he is deserving, the harm falls back on us. All this is said in this Christmas season when such expression is the natural thing, but really the only expression that counts is the sum of our attitude during the year. Anyway, among the certainties in my own mind is the desire that every one of my readers—and some of them have been such for forty years—have Christmas cheer, abounding good-will and a new year of hopes realized.

There Are Brighter Days

TO most of us the Christmas season brings a sense of deepening responsibility to the world about us. There is a stimulus and inspiration in the atmosphere and tradition of Christmas, a reaching out to farther horizons, a quickening sympathy, a keener recognition of human kinship. In the light of this spirit we meditate on farm life in America, on farming in other lands, on shifting social values and on a future hard to read.

In the light of the Christmas spirit we see nearly half of the human race in far away China, India and Japan, crowded, poverty and famine stricken, hopelessly plodding toward still greater congestion, toward still greater poverty, if such there be.

We see in Western Europe and North America a declining birth rate and a surplus of manufactured commodities. We see in the United States, in South America, and in Australia a vast surplus of food, and distress brought about by efficiency.

Poverty and scarcity we can understand; poverty and abundance we find hard to understand. We know that there must be a way out, that prosperity, in a greater measure, is bound to return and that brighter days on our farms will brighten the life of many near and far.

To the readers of the Pennsylvania Farmer the Christmas Season will bring renewed hope and faith, and a new confidence that in its upward climb mankind will know less of sorrow and more of joy; that its memories of war, famine and pestilence will grow dim; that faith and hope will shine as we travel our appointed way.

J. G. L.

Farm Practice

By W. D. ZINN

Son, Remember; Luke 16-25

BIBLE students will readily recognize the above text as representing the words of Abraham in Heaven to the rich man in hades.

It is not my purpose to discuss at length the spiritual meaning of the text. Suffice it to say that it with other passages of Scripture teach that in the world to come we are to retain our mental faculties.

Another thing that this passage teaches is that the riches of this world avail us nothing in the world to come unless those riches have been used to bless humanity. How foolish it is to enjoy the pleasures of life "but for a season" and then take up our eternal abode with the rich man who on earth fared sumptuously while Lazarus had only crumbs.

May I now turn from the spiritual meaning of this text and try to see what it means to us in a material way? The old year is ebbing its life away and the New Year is about to be ushered in. As farmers what kind of memories have we of the dying year and what are our hopes for the New Year?

Losses and Sorrow

To the writer the old year has been fraught with the heaviest financial losses he has ever sustained. These losses may be regained and are not vital to his well being, but the old year has also brought into his life the saddest bereavement and most heart-felt loneliness of any of its 72 predecessors, and the devil has said to me, as he said to Job, "Curse God and die." Not so, evil one, amid all these losses and sad bereavements I can look up and say: "The Lord gave and the Lord has taken away; blessed be the name of the Lord."

When I count my blessings one by one I find they are more numerous than the sands of the sea and many times more numerous than I have deserved; and I pray God that all my readers may have the same feeling when they recall the blessings of the old year.

Some Recompenses

Space permits me to mention but a few of these. While many have been tossed on beds of affliction I have not lost a single day on account of illness. One of the things for which I am most thankful and that gives me the greatest pleasure is the hundreds of letters I have received, full of overflowing with expressions of gratitude for the help I have given the writers in the solution of their farm problems. I began the old year with the determination of answering personally every letter, but occasionally I find one that has been overlooked. For this failure I beg the pardon of the writers.

This is the time of year in which we ought to settle with ourselves. How many of my readers have been in the habit of doing this some time during the year? The most opportune time to do this, it seems to me, is at the close of the old year or at the beginning of the new. I began this kind of work on the first day of January, 1883, and have kept it up until the present.

To Take Stock

During holidays it will be a good time to sit down and rearrange our fields and change our rotations, provided we find they are not just what they should be. Corporations pay large salaries to men who have the ability to think their business problems out for them. To you, my farmer reader, the management of your farm is the biggest business on earth. Are you going to think your business through or will you let it run like a ship without a rudder? The only way we have of judging of the future is by the past. We have had a good many prosperous years in the past. We believe we will have them in the future.

1931 Model Now Ready To Go!



The triple-combination body available for the new Six-Speed Special is easily converted from the 60-bushel grain box, shown here, to a flatbed platform, or a roomy stock rack.



« BRIEF FACTS »

Wheelbase: 136 inches
Rated Capacity: 1½ tons
Engine: Powerful and unusually economical
Clutch: Single dry-plate
Final Drive: Spiral bevel gear of the 2-speed type, providing, with the transmission speeds, 6 speeds forward and 2 reverse
Springs: Semi-elliptic front and rear. Auxiliary rear springs quarter elliptic
Brakes: 4-wheel mechanical

The new Six-Speed Special is sold and serviced by 161 Company-owned branches and dealers everywhere.

It's the NEW International SIX-SPEED SPECIAL

NOW we round out the new line of International Trucks by announcing an up-to-the minute Six-Speed Special.

In addition to retaining all the famous features of the original Six-Speed Special the new truck is finer in every way. Increased power, 1½-ton rating; smoother operation and handling; greater comfort for the driver; improvements throughout making for sturdiness and long life; and new, attractive design of hood, radiator and body that distinguishes all the models in the new International line.

The original Six-Speed Special gave the world something new in performance. Its 2-speed rear axle won the approval of truck users the world over. It was the first heavy-duty speed truck to offer six forward and two reverse speeds, providing instant speed for the hard, smooth roads or tremendous pulling power for tough going under full load.

If you need real cost-cutting economy and efficiency in your hauling, let the new Six-Speed Special handle your loads. Ask the nearest branch or dealer to demonstrate. Write for the "Six-Speed Special" folder.

INTERNATIONAL HARVESTER COMPANY

606 So. Michigan Ave. OF AMERICA Chicago, Illinois

(Incorporated)
Branches at Pittsburgh, Harrisburg, Philadelphia, Pa.
and at 95 other points in the United States.

Farm homes that are castles

You can tell the farm home which is a castle in the proper sense of the word. Not a mansion to be sure. But always imposing, impressive. Large, sunshiny rooms in the midst of broad acres and open fields. Expanse of ground, fresh country air. Neat trimmings and landscaping which add dignity to the house.

You know before you enter that the owner has a certain soundness of thinking usually called business sense. Always on guard against waste. And usually the housewife tells you that thrift—care and scrutiny at the time of buying—bought those extras which make the inside seem so complete. For, she adds, they read the advertisements.

It pays to read advertising

Reading the advertisements tells you what to buy and how to get most value for every penny spent. A dozen needs arise on your farm every week. Knowing which machine which tools, which automobile, which suite of furniture, which cooking fuel is the best for the price you pay, will save money otherwise thrown away. Perhaps as little as twenty-five cents a week—perhaps a hundred dollars a single purchase.

You can beautify your home—make a real castle out of it—with money saved in buying advertised goods. When you buy merchandise advertised by name, you get purchase value in the greatest degree from every dollar spent.



THE NEW WEED TIRE CHAIN

Supreme

Tell your dealer you want the new Weed American Tire Chain. It gives 70% more mileage. Many users report 200% more mileage and some even more than that, thanks to the reinforcing bars of hardened steel electrically welded to contact links.

Weed Tire Chain RADIO PROGRAM

Tune in every Friday evening at 8:30 Eastern Standard Time, 7:30 Central Standard Time, over the Columbia Broadcasting System.

Alton, Ohio	WABC	Fort Wayne, Ind.	WOWO	Philadelphia, Pa.	WCAU
Baltimore, Md.	WACO	Kansas City, Mo.	KMBC	Pittsburgh, Pa.	WJAS
Boston, Mass.	WNAO	Minneapolis, Minn.	WCCO	Providence, R. I.	WEAN
Buffalo, N. Y.	WGR	New York, N. Y.	WABC	St. Louis, Mo.	KMOX
Chicago, Ill.	WMAO	Oil City, Pa.	WLBW	Syracuse, N. Y.	WFBL
Cincinnati, Ohio	WKRC	Oklahoma City	KFIF	Toledo, Ohio	WSPD
Dallas, Texas	KRBD	Omaha, Nebr.	KOIL	Washington, D. C.	WMAJ
Detroit, Mich.	WXYZ				

Don't let horses suffer . . . Reach for ABSORBINE

For 35 years farmers have relied on Absorbine, when strains and sprains threaten lameness. Brings quick relief to sore, swollen tendons and muscles. Aids healing of ugly gashes, sores. No blisters, no lost hair, no lay-ups. Famous for economy. \$2.50 a bottle—all druggists. W. F. Young, Inc., 351 Lyman St., Springfield, Mass.

CUT POWER COSTS with Your FORD

Saw, Grind, Pump, Spray, Etc. Ford Motor Co. has a new line of power units for the farmer. They are simple, efficient, and economical. They will save you money on your power needs. Write for a free catalog.

LET US TAN YOUR HIDE

FUR DRESSERS and TAXIDERMISTS. SEND FOR CATALOG. The Crosby Frislan Fur Company, 564 Lyell Avenue, Rochester, N. Y.



Commander Byrd Says

Reg. U. S. Pat. Off. Old Reliable

Brown's Beach Jacket

More than lived up to his expectations in the Antarctic. Many members of his expedition wore Brown's Beach Jackets. Farmers everywhere have found this jacket to be the most satisfactory garment for hard work on the farm. It is snug-fitting, comfortable to work in, and as warm as an overcoat, with windproof wool-wool lining. Three styles suit with or without collar, and cost.

Ask your dealer

BROWN'S BEACH JACKET COMPANY
Worcester, Massachusetts

POULTRY PAPER 12 BIG ISSUES 25c

Write or pin this ad on a letter with your name and address and mail it to us at 25c. Sample or copy for the next 12 issues. American Poultry Journal, 375 So. Clark Street, Chicago, Illinois.

Read through this paper carefully. You will find advertisements covering almost every human need. They are filled with hints for the household, hints for health, hints for clothing. Also large numbers of seed, poultry, stock food and implement advertisements. When answering them, mention Pennsylvania Farmer.

NESHAMINY GARDENS

By R. P. KESTER

"WHEN I was a child, I spake as a child, I understood as a child, I thought as a child; but when I became a man I put away childish things."

So wrote the Apostle Paul nearly nineteen hundred years ago. So thinks the average man today. But Paul's advancement from childhood to manhood carried him to an understanding of Truth which was illuminating and satisfactory. It was not merely that negative experience which men of today call "disillusionment."

When I was a child I firmly believed in a veritable Santa Claus. Mother, who was a good reader, read frequently to us children that graphic poem, "The Night before Christmas." She wisely never commented on it or tried to explain it; hence we accepted the story "as is," using our imaginations to fill in where our childish minds failed to understand.

Santa Claus was as real as father and mother. The eight reindeer were as much a fact as the animals out in the barn, and we had no more doubt of the reality of Santa's nocturnal visits in his sleigh than we had of the frequent visits of grandfather and grandmother who came to see us in their long blue cutters.

where present, even in this practical and cynical age. Men and women in order to appear grown-up sometimes discard the real things of life because they think them primitive or childish. Much learning has made us mad in some directions, but the accumulated wisdom of the ages cannot be brushed aside with impunity. Superficial learning has caused some people to sneer at the faith of children and of men in earlier ages. But what has been put in its place that makes for greater happiness? Are those who flippantly say, "There ain't no Santa Claus," better or happier than those who retain their faith in the childish ideals of the race?

No Santa Claus? Why, you might as well believe there are no fairies in the violet-covered dells; no elf behind the roguish eyes of a child. Because you do not see him is no proof there is no Santa Claus. The most real things of life are never seen by the eyes of men. Verily, there is a Santa Claus. Proof of his being is seen in the countless hospitals. In the homes for orphan children, cripples and indigent people; in the many relief organizations supported by voluntary contributions. We see his jolly face shining when a person drops a coin in the palm of an unfortunate, wipes a



As I remember, we were not hurt by the fact that Santa Claus did not leave very many things at our house. Mother made it all right with us by explaining, and no doubt her eyes were tear-dimmed as she explained—that Santa Claus had so many little boys and girls to visit that he would not have enough things to go 'round if he should leave too many at one place. But it was sufficient that he came at all. To be visited by that jolly, little, red-coated fellow, even if we could not see him, was a joyous, exhilarating event.

I do not remember anything about the passing of my childish belief in a personal Santa Claus. Something else, more mystical but none the less real, seems to have taken its place in my mind. There seems to have been a natural and logical transition from a red-coated Santa Claus to a conception of a universal Good Spirit abroad everywhere. At first, I thought of this Good Spirit as residing in (or with) father and mother, and my grandparents. I have no recollection of passing through a period of disillusionment and doubt, culminating in skepticism and cynicism. I seem to have had all through my life a sustaining faith in the reality of an universal spirit of Goodness.

Although I have "put away childish things" as far as the belief in a mythical Santa Claus is concerned, put it away for what is still more real and helpful to me as a man. I yet am thrilled with happiness when I see the little folks of the family happy and joyous in their belief in him and what he does. It renews my youth; it forget that I have passed beyond it; it passes beyond it as the ripened grain has passed beyond the green shoot of springtime.

tear from the face of a troubled child, or hands a cup of cold water to a helpless brother. No Santa Claus! Yes, thank God, he is as real today as when he came to our home in his sleigh drawn by eight tiny reindeer in the long-ago!

Friendly Talks

By Edgar L. Vincent

A VISION comes to me of an old man, plodding knee deep through the snows of December, dragging behind him a nice little hemlock tree which in a day or two will be set up in the best room of the house for Christmas. Because the children will all be home, seven in all, now men and women, with their wives and little ones. A stout cord will be drawn across the room in front of the Christmas tree, to receive the overflow of lovely things. Then on Christmas day all will be gathered in that room. Grandfather and Grandmother will be in the seats of honor up in front. At a word from the old man, all will sing that fine old hymn, "I'm the Child of a King."

That was yesterday. Grandfather and Grandmother are gone to spend Christmas with the King; but in the homes of the young folks other Christmas trees will be set up and other walls will echo with the notes of "I'm the Child of a King."

If this were true of every home in all this land, and if the Christ spirit really and truly possessed the hearts of men, this would be a far better world than it is. For everywhere we need to feel, if only for a little while, the touch of the Man of Galilee on our hearts, bringing more of love, more of peace and more of good-will to our lives.

MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

PENNSYLVANIA FARMER

Published Weekly

Consolidated with PENNSYLVANIA STOCKMAN and FARMER
Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa., under the Act of March 3, 1879.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Vol. 103

Pittsburgh, Pa., December 20, 1930

No. 25

"A Little Farm, Well Tilled"

By S. W. FLETCHER

THE agricultural economists tell us that the old adage:

"A little farm, well tilled,
A little wife, well willed."

no longer expresses the masculine ideal, in the first prerequisite, at least. In staple crop farming the drift toward larger farms goes on apace. This is due to a number of economic factors, chiefly the necessity of lowering the cost of production by cultivating a larger acreage, so as to justify the use of expensive but labor-saving machinery. The advent of the efficient general purpose tractor is one factor in this development.

A number of agricultural economists recently have announced their conclusion that the most profitable farm unit in the Corn Belt would be 1,200 acres, comprising ten of the average Corn Belt farms of today. This seems a rather extreme statement. If true, it is fraught with danger to American agriculture.

A 1,200-acre Corn-Belt farm would necessitate corporate ownership; very few individuals could command the capital that would be required. It would mean ten hired men where formerly there were ten independent land owners.

The Trend in Pennsylvania

Even though the 1,200 acres were to be operated not as a unit but as ten farms, with interchange of machinery, and collective purchase of supplies and pooling of sales, the farmers on them still would be hired men. This would be a step toward agricultural peasantry, the full flower of which may be seen in the collective farming of Russia today. Corporate farming certainly is not the goal of American agriculture.

The average size of Pennsylvania farms is increasing in spite of the fact that the number of farms has decreased from 202,250 in 1920 to 172,046 in 1930. In the northern tier of counties, especially, the process of combining several adjacent small farms into one large farm has proceeded to a considerable degree, with distinct economic advantage to the agriculture of that district. But these larger farms are, for the most part, privately owned. There is no evidence of a drift toward corporate farming in Pennsylvania. I hope there never will be.

This is true in fruit growing, also. The handicaps of large scale corporate fruit growing have been demonstrated time and again in the eastern states; on the Pacific Coast, however, there are a considerable number of successful "factory" fruit farms. We do not have to go outside of Pennsylvania to find conspicuous examples; and the neighboring states of New Jersey, Delaware, Maryland and Virginia are not without concrete evidence on this point. In general, they have failed because of a high overhead, and because of a lack of the intense personal interest and application which usually accompany private ownership. There are few examples of successful corporate fruit growing, on a very large scale in the East. Practically all of the outstanding orchards are the product of individual ownership.

Moderate Sized Orchards

However definite may be the drift toward a larger crop acreage per farm in general farming, this trend is not evident in fruit growing. We have a few fruit growers, men of large administrative capacity, who own and operate successfully a very large acreage of orchard, even 1,000 acres or more; but the great majority of our fruit growers have less than 100 acres.

The reasons for this difference are not hard to find. The cost of production of the staple crops is lowered by the use of labor-saving machinery. This has been developed for practically all the cultural operations, especially harvesting; but a large acreage is required to justify their purchase. Fruit growing, on the other hand, has not been



the beneficiary of machinery improvement to the extent of general farming. The tractor saves time, and therefore money, in the orchard as well as in the field; this is the only orchard operation that is conspicuously benefited by the use of improved machinery. Fertilizer may be applied with a distributor or drill, but usually it is best to hand-sow it, circling the tree, so as to gauge the amount applied by the need of each tree. Pruning must always be a laborious manual operation. No machine can be substituted for the human judgment required in pruning a fruit tree.

Spraying has yielded to a considerable degree by the use of machinery, but even the most modern and most economical method of applying the chemicals—the stationary spray plant—requires a large amount of man labor, and the same is true of dusting. It is probable that the time may come when the diseases and insect pests of orchards will be controlled with far less man labor than at present, possibly by piping the orchard not merely to carry the spray materials to the trees but also to apply them.

Hand Operations

The greatest contribution of machinery to a lower cost of producing the staple crops is in harvesting. In fruit growing, very little saving has been effected here, and very little is possible. There is no practicable substitute for hand picking of fruit. This is true, not only because fruit is so easily injured by bruising, but also because the picking is selective. Few fruits, except winter apples, are harvested at one picking. The mature and well-colored specimens are picked; the immature and poorly colored specimens are left to develop larger size or higher color. Some growers even pick winter apple trees several times.

So-called "grading machines" have simplified the operation of grading, but only as to the size factor. Grades are based on color and freedom from blemishes, as well as on size. There is no substitute for the human eye here. After the fruit has been graded, various mechanical devices developed recently facilitate packing, but this is a comparatively minor factor in the cost of production.

It appears, therefore, that fruit growing has benefited less by the use of improved machinery than most other types of farming, and that there is little prospect of a marked advance in that direction. It is not capable of being mechanized to the extent that already is in evidence in the production of the staple farm crops. It is now, and must continue to be, dependent chiefly on the human eye and the human hand, guided by human judgment. This is the fundamental reason for the

quite general failure of corporate fruit growing on a large scale.

A sixty-acre orchard will justify the use of a tractor, a truck, a high-power sprayer or a stationary spray plant, a sizing machine and any other orchard machinery just about as much as a 600-acre orchard. Profit in fruit growing, as in general farming, depends on volume of business, as well as on cost of production and price received. Up to a certain point, the larger the output the greater the profit, even though the net per acre may not be as large as with a smaller acreage, more intensively cultivated. The point of diminishing returns in fruit growing is reached whenever the owner has so much acreage that he is not able to give it his best personal attention, or to secure such service. With some men this point may be reached at 60 acres; with others at 1,000 acres.

Pennsylvania is a state of moderate sized orchards. We have a considerable number of fruit growers who own and operate personally several hundred acres. But the typical Pennsylvania orchard is one of 30 to 100 acres, owned by one man, and operated with the aid of his family. This is an economic unit under present conditions. It is one of the reasons why Pennsylvania is coming through this period of agricultural depression better than some of her sister states, which have larger individual or corporate holdings.

As applied to Pennsylvania fruit growing, the "little farm, well tilled" policy still is sound, provided the little farm is large enough to justify the use of the best labor-saving orchard equipment, and provided it also represents the maximum managerial capacity of the owner.

Soil, Stadium, State House

IF we change the problem of keeping the boys and girls on the farm to that of keeping them interested in rural life we would, doubtless, get quicker and more sympathetic cooperation from the young people.

When we plan outings a trip to an automobile show or a few hours in a stadium should, occasionally, be passed up for a visit to a court of justice, a gathering of educators, convention of business men or bankers (where the public is welcomed) anywhere where one may catch the thrill of witnessing trained minds in action.

It is inconceivable that all country youths become farmers—every man to his calling say we—but there is dearth of professional men who understand rural problems. Recruits who are not city-minded are needed for their thinning ranks—clean, honest men with the breadth of vision and clearness of thought that are gifts of the open country.

Too many men in whom God placed the gift of healing have drifted to hospital wards or a specialist's office in the city, only to find the competition keen and be trailed by a hunger for home.

The church has work and honors for the ambassadors of Him who was born in the country where the people received Him gladly. What a chance for a director of social activities in the country! Great educators are needed—men and women prepared to develop the gift that is in a country child instead of trimming it to a city pattern.

There are Lincolns and Websters, Talmades and Mayos abroad in the land wherever childish feet are treading, and the influences surrounding these embryo leaders will decide whether the nation shall profit thereby or by its indifference to the gods of sports and spectacular exploits divert those streams of stronger life from country lanes, that have made and lent it great. Gene Stratton Porter, of beloved memory, filled her books with the beauty and opportunity to be found in rural life, and youth responded eagerly. We need more love of home and pride in our surroundings.

M. C. S.

PENNSYLVANIA FARMER

Published Weekly
Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
GEORGE M. SLOCUM, Vice-President
NEFF LAING, Manager

EDITORIAL STAFF
E. S. BAYARD, Editor-in-Chief
C. L. WHITE, Editor
MILES HORST, Field Editor
G. W. HARRIS, Field Editor

Contributing Editors: R. P. Kester, Alva Agee, L. W. Lighty, W. D. Zina,
R. U. Buehmann, J. T. Shiley, F. L. Bentley, J. G. Lipman,
S. W. Fletcher, H. C. Knandel, A. A. Borland,
R. L. Scharringhausen, Gilbert S. Watts,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING
\$1.00 per square inch measurement, or \$14.00 per inch each insertion. Minimum space 6 lines. Special rates on application for livestock and classified advertising. No deceptive, immoral or swindling advertisement inserted at any price.

Member Agricultural Publishers' Association,
Audit Bureau of Circulations.

Volume 103, No. 25
Established 1877

And suddenly there was with the angel a multitude of the heavenly host praising God and saying,

Glory to God in the highest, and on earth peace, good will toward men.

—Luke 11:13-14

FOR RURAL ELECTRIFICATION

THE Pennsylvania State Grange, at its annual meeting last week, in commending the rural group of the Joint Committee on Rural Electrification, displayed sound sense and intelligent interest in farm affairs. In view of the progress in rural electrification, made through the efforts of the Joint Committee under Order 28, and the promise its further activities hold out for extension of electric service to farms at lowest obtainable rates, the Grange is justified in taking this stand. Pennsylvania is now a leading state in rural electrification and all agricultural interests should unite in helping to keep it there.

WANTS A FARM

A PENNSYLVANIA tenant farmer who wants a farm of his own and realizes that this is a good time to invest writes us: "Can you locate me a good farm, a four or six-horse-power farm for livestock or dairy or poultry? When I answer an advertisement in your paper some one is always ahead of me. I am coming in now ahead of the advertisements." Letters of interest to this man will be forwarded to him, for we want to help every man who is in the market for a farm. There are too few buyers now for the good of land-owners; but those who invest in the right kind of land now are not likely to regret it.

A WINTER VACATION

TWO years ago a radio was a rarity. Now one is found in every two homes. Twenty years ago an automobile ride was an event. Today it is a common occurrence. Five years ago a farmers' vacation by special train was undreamed of by most people. In 1930 two such tours were conducted by our paper, giving hundreds of farm folks an opportunity of seeing new places and joining the once exclusive company of travelers. February 3-14 is the date of our second farmers' winter vacation tour to the Far South, as readers will note in the advertisement on the back cover of this issue. Every mail is now bringing requests for information concerning this trip. Those interested in taking the journey should let us know so that we can send them more details about it.

ELECTRIFIED HOTBEDS

NEW uses are constantly being found for electricity on farms, most, however, in connection with light or power. The opening of another field is indicated in a report of tests near Detroit where electric-generated heat was used to hasten plant growth by controlling soil temperature. This is said to be practicable in hotbeds. Who knows but it may expand to fields some day? If so the farmer may not only light and heat his home and do his chores by electricity but make his own weather as well. At any rate the known uses of this energy are so valuable to the farm that nothing should be allowed to interfere with their normal development.

AN APPEAL TO FARMERS

ARTHUR WOODS, chairman of President Hoover's emergency committee for employment, asks farmers in good circumstances to give employment this winter to people in their communities who are in distress because they cannot get work. Realizing that many farmers themselves are affected by adverse conditions he believes that others will do enough building and repairing to help relieve the situation, especially if concerted effort is made in that direction. This is already being done to some extent, probably to a far greater extent than we realize. Now is a good time to finish delayed construction, since materials and labor are abundant and reasonable in price. The only objection to doing so is the blow it will deal the chronic calamity howler to hear that farmers are better off than some other people.

A GRAVE PROBLEM

A STEP has been taken in human progress. We are not sure of the direction. It may be forward, backward or sideways, but it is a change from the time-honored past and the maligned present. This step—or stumble—is the invention or discovery of the square pie. The depth of a pie may reflect the prosperity of the provider or the economy of the cook, but from time immemorial the length and breadth thereof have been encompassed in a circle. The obvious advantages of this arrangement is that it lends itself to equitable division to meet the size of the family or unexpected company. Mathematically a circle contains 360 degrees, each of which may be further divided into minutes and seconds. This allows considerable leeway in cutting a pie, and the cruel truth is that certain restaurateurs have taken advantage of the mathematics to the extent of getting down to fine points in pie division. Since in pie as in politics a fair division is desired, we wonder how this will be obtained from square pies. The fellow who gets a corner piece would be pretty sure to get too much crust, while the midway section would be unbalanced with filler. A possible solution to this problem might be cutting the pie in quarters, which is the only right way to cut a pie.

CHANGES IN MEAT INDUSTRY

REFRIGERATION was responsible largely for the centralization of the meat industry. Great packing plants grew up at central markets, with branch houses at principal centers of consumption and refrigerator car lines connecting the two. Now improvements in refrigeration are responsible for the decentralization of the same industry. The factory system of operation, whereby all products of the animal are utilized, is available to small as well as to large plants. Refrigeration in transportation is available to small as well as to large plants. More and more livestock is being slaughtered near the place of its production, the small plants located there selling in competition with anybody in centers of consumption.

Recently a large shipment of beef went to an eastern market from a range state. Years ago the cattle would have gone to Chicago or Kansas City. The Corn Belt packing plants of comparatively small capacity but with nearby livestock supplies are in hot competition with the big central plants, and they are growing while packing-town is not. Changes are in progress in the meat industry, less rapid than those of an earlier day perhaps but no less vital.

FARM BANKRUPTCIES

ACCORDING to the economists of the United States Department of Agriculture the average farm bankruptcy rate for the latest period for which data are available was 0.78 of one farmer for every 1,000 farmers. Before the war it was 0.14 of one farmer per thousand. We wish that some analysis of farm bankruptcies were possible. Our observation has been, in this region only, that the following three causes account for the majority of them: Endorsements, speculation in some other business than that of the farm, and attempting to operate on all-borrowed capital. Those whose opportunities for observation are superior to ours are invited to give their conclusions. If we are wrong in ascribing to these three things a majority of farm failures we want to know it.

MUSSEL SHOALS

THE American Farm Bureau Federation's proposal that a cooperative organization operate Mussel Shoals is the latest compromise offered in the settlement of a question which has been before the country for a dozen years. There are other compromises calling for various degrees of government operation. We wonder if those who advocate government operation of electric plants ever think of the fact that all the advancement in the production and use of electricity has been due to private enterprise. That has given the world the use of electricity at reasonable rates. That has produced all the means whereby it serves us. That and that alone will continue to improve and to enlarge the service it can render. So far as we can remember not a single improvement either in production or in use has originated in public or government operation. We are indebted to private enterprise for all the good we get out of electricity.

Or do the advocates of government operation ever stop to consider how many municipal electric plants, operated under public control, have become obsolete and have been discontinued? Over 550 of them within a comparatively short period. It is safe to say, in these progressive days, that a government owned and operated plant will become obsolete in a decade or even less, while a privately owned plant will be materially changed and improved in the same period and continue to render service.

The campaign now in progress for government ownership has not a sound leg to stand on. The campaigners for government operation of Mussel Shoals cheerfully ignore all such facts as those above stated; and in the production of fertilizer they ignore the fact that science stimulated by private enterprise has found cheaper ways to produce nitrogen than the only way possible at Mussel Shoals. Government operation is never cheap and never efficient. It cannot improve, at least does not, but remains practically stationary. And it costs more, in any line, than private operation. If experience has proved anything at all as proved these things, and we are foolish if we fail to regard its lessons. Let Mussel Shoals and every other service enterprise be operated for the benefit of the public by those who can and will do it best and at least cost—those who have some incentive to operate in this way.

New Jersey Farm Comment

By G. W. HARRIS

FIVE New Jersey farmers received the honorary degree of Master Farmer at a banquet at New Brunswick given in their honor Wednesday, December 17. The Master Farmer project, a nation-wide movement to honor outstanding achievement in agriculture, was first started in New Jersey by Pennsylvania Farmer in 1927. The American Agriculturist joined with Pennsylvania Farmer the following year in honoring New Jersey farmers, and again this year the two farm papers have cooperated in centering attention on a group of men who are outstanding farmers, good homemakers and high-class citizens, men who bring dignity to agriculture.

GEORGE SMITH & SON
Middlesex County

A 55-year-old Middlesex county farmer planted ten acres of apple trees on his 70-acre farm in 1900, and his neighbors called him crazy, saying that he would never live to see them in bearing. That man was George Smith of South River; he has lived to bring 35 acres more of apples successfully into production and today is still the boss of the partnership business with his son Lawrence. Ten years after he planted his first trees he started to build a cold storage plant on his farm; then his friends and neighbors were convinced that he should be in an insane asylum.

George Smith, now 84, continues to look into the future, not the past. As he increased the acre-

age in fruit he looked forward to the time when Lawrence would become a partner in the farm business. In 1910 his building one of the first farm cold storage plants in the state was the result of well-laid plans to secure the winter and spring markets for apples in New Brunswick and other nearby cities. His success in this venture is further evidence of foresight and good business.

His eleven children, six of whom are normal school and business school graduates, is the one part of Mr. Smith's life of which he is most proud.

Mr. Smith was until recent years very active in the New Jersey State Horticultural Society. It was a crate of his strawberries which took first prize for the Horticultural Society at the World's Fair in Chicago in 1892, and it would seem that that should make him world's champion strawberry grower of that year.

Lawrence, the other partner in the business, now manages most of the heavier tasks on the farm. He is Master of the Milltown Grange and deserves much credit for the growth and interest in that organization. Besides being interested in his own local community, he is vice-president of the Middlesex County Board of Agriculture.

When we view this successful and well-balanced father and son business and home it is interesting to remember that George Smith was not always a farmer. He worked as a machinist for 12 years and later for eight years was a locomotive engineer. As the panorama of farms slipped by the window of his locomotive cab when on his run, he used to dream of the time when he would have enough money saved to buy a farm. This Master Farmer made his earliest dream of the farm come true.

JOHN H. WEED
Cumberland County

VINELAND boasts of being the greatest poultry center of the East. Since John H. Weed first came to this part of Cumberland county 17 years ago, the poultry industry here has grown and John Weed has grown with it. His 14-acre farm is typical of the best poultry farms and homes to be found in the Vineland district.

When we consider that his birds last year produced an average of 179 eggs each, we realize that his flock of 4,000 White Leghorns are not of ordinary or common stock. From these birds this

MY sincere best wishes are extended to all with the hope that this Christmas may bring good cheer and happiness to every rural home.

G. W. Harris

past season he hatched and sold 50,000 baby chicks, and they were all sold at the farm.

With the thought in mind to merchandise his eggs better, Mr. Weed has developed a carton trade of "Yesterlaid" eggs. Each egg that goes into these dozen-egg cartons is candled and stamped "Yesterlaid," the carton is then sealed and the date stamped on it. This package was introduced through several retailers in New York City two years ago and a select trade is gradually being developed.

Mr. Weed is as progressive and farsighted in other phases of his poultry business as he is in merchandising his eggs. Strict sanitation and the best and most modern breeding and production practices are conducted on this farm.



Above are the directors of the Inter-State Milk Producers' Association. Top row, standing, left to right: A. R. Marvel, S. K. Andrews, S. U. Troutman, C. C. Tallman, H. B. Stewart, J. A. Poorbaugh, J. H. Bennet, J. C. Sutton, I. J. Book, S. B. Lehman, C. F. Preston, A. Sarig, J. W. Keith, R. W. Balderston, E. N. James, I. V. Otto, A. B. Waddington, E. H. Donovan, R. I. Tussey. Bottom row, seated, left to right: F. M. Twining, A. A. Miller, F. Shangle, H. D. Allebach, F. P. Willis, I. R. Zollers and R. F. Brinton.

Mr. Weed is very active in working with his community. When he retired from his fifth year as president of the Vineland Poultry Association this year members of the Association presented a beautiful chest of silver to Mr. and Mrs. Weed in appreciation of his service to the Vineland poultrymen. This exemplifies the esteem in which he is known in his own community.

He is president of the Vineland Chamber of Commerce, vice-president of the New Jersey State Poultry Association and president of the South Jersey Federation of Poultry Associations.

The Weed home, which balances a successful business and life, is beautifully furnished and equipped with the most modern of conveniences for comfort. The partner in this poultry business who has contributed a large portion to its success is Mrs. Weed.

WILLIAM SCHOBEL
Salem County

IT is impossible to talk with Mr. Schobel long before realizing that farming to him is more than a means of making a living. He enjoys seeing things grow. When Mr. Schobel first came to this country he worked in a store, but he always wanted to live on a farm and before long bought his first piece of land, which is still a piece of his farm. Almost at once he began to set out fruit trees and he is still setting them. His orchards and the cold storage plant which he has erected on his farm bear testimony to his success as a fruit grower.

Mr. and Mrs. Schobel can well be proud of their boys and girls. Three boys are associated with him on the farm and one is still in school. One daughter is a teacher and another is with her parents. One daughter has made an enviable record as an outstanding Four-H Club worker.

ord as an outstanding Four-H Club worker.

The Schobels are very active in their community church, Mr. Schobel is steward and trustee and the entire family attend regularly. Mr. Schobel is a member of the Grange, a Farm Bureau committeeman and a director of his bank.

No one point can give a better understanding of his character than his reaction toward Sunday selling. We asked if he sold much fruit at the farm and he replied, "No, because most of the buyers come on Sunday. We feel that we are entitled to one day of rest and we believe that we cannot afford to sell our produce on Sunday." In speaking of their fine home, he said, "Our home was comfortable before we remodeled it, but we cannot see why farmers should not have just as good a home as workers in the city."

We believe that Mr. Schobel with his productive farm, his sterling character and his willingness to work for those things that make a community better, will be an honor to the Master Farmer movement.

W. W. HIBLER
Sussex County

FROM a strictly farming point of view, every dairyman will realize the work required to build a dairy herd to a point where the average production is 9,000 pounds. Mr. Hibler has operated his own farm for the past twenty-eight years. His farm of 283 acres is a dairy farm with a rotation of oats, corn and hay, and a dairy herd of twenty-two pure-bred Holsteins.

His interest in his community is shown by the positions he has held. He has been a director of his Farm Bureau, trustee of his local school, and a member of the Grange and church.

Augusta Hibler, daughter of Mr. and Mrs. Hibler is a graduate of Russell Sage College and has been taking work in child study at Cornell for a master's degree.

The Master Farmer viewpoint is frequently illustrated by the balance between farm and home so far as labor-saving appliances are concerned. Mr. Hibler's farm is

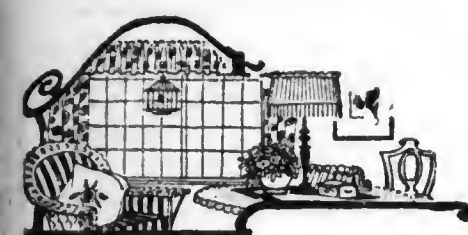
well supplied with trucks, tractors and all the labor-saving devices that go with them. The home, however, has not been neglected. Here we find a furnace, an electric refrigerator, a bathroom, a radio and electric lights and appliances.

This is the Master Farmer combination, a producing farm, a comfortable up-to-date home, a contented family and a real interest in helping the community.

THE meeting of South Jersey poultrymen at Vineland last Thursday afternoon and evening gives very convincing proof that state-wide conventions cannot take the place of local gatherings. The State Poultry Convention held at Asbury Park this fall failed to draw the number of poultrymen and create the interest that was evident at the Vineland meeting.

With the increasing ease and rapidity of transportation within recent years farmers and farm organizations, as well as business men, have gone convention wild. The thought in the mind of many would appear to be that everything must be done in a glamorous manner, resulting in the expenditure of large amounts of money by individuals and organizations. Many are beginning to doubt the logic of this reasoning.

It is not our object to condemn all agricultural conventions, but unless a program of sufficient merit to draw farmers from all parts of the state can be offered, it is hardly fair to provide merely a three or four-day outing to a few at the expense of any farm organization. It is time that we gave more serious consideration to large local and sectional groups of farmers through their state organizations. The convention idea has been overdone without giving careful enough consideration to its economic value to farmers.



The Farm Home



And, Being Dead Yet Speaketh

[The inspiring Christmas messages of the late Hepsy Neff would make a volume worthy of a place in any library. We cannot publish all of them here but we give extracts from two of them, not merely for the sake of the messages but in memory of her.]

MILLIONS of years have been spent in making this earth a good place for humanity; a friendly place where all man's needs can be met. The rocks have gathered ores and the precious metals; the earth has stored coal and oil; he bills have been clothed with great forests and the rich plains have waited to give their bounteous harvests, with abundant waterways to carry our surplus to the seas. But there is still an unfilled need. When the blazing star hung above Judea's hills a message, needed then and never more needed than now, floated upon the air. "Peace and Good Will" were asked together as the one and only hope of the world, and because truth must forever be embodied in a Person and lived among us before our blurred eyes can begin to see it, the Person came with the message.

For nearly two thousand years we have been remembering that vision, although the world has sometimes forgotten the Person. We need all the joy of the Christmas season, but joy alone is not enough. We must remember that peace is a lost hope without Good Will and good will is the only Christmas spirit kept in action throughout all the year.

Perhaps we cannot fairly measure the distance mankind has traveled toward the only hope of permanent peace, a peace which includes justice among men. To realize something of the infinite Love which allows us to suffer from our mistakes, whether of body, mind or spirit, is to begin to see, in our own land at least, signs of progress.

Through suffering the slowest of us must learn. We slow to find the best because we are slow to "taste and see"? And yet a multitude of facts prove that the world never had so many agencies for good; never so many persons working for human betterment, as now, because so many common every-day folks like you and me give of their means to sustain such work. Take one agency alone, the Red Cross. Not only does it reach the remotest corners of the earth with food, shelter, clothes and healing, but the need and the relief are never far apart.

Both human suffering and human kindness are today spreading the Christmas message of the angels everywhere by our help. We chafe sometimes because the Great Light has not yet found all the dark corners, because crime and injustice are far too prevalent. But we forget that here can be no sharp, black shadows except where the sun is shining right.

Only a pagan people could consent to worship a goddess who was born all grown. The same Infinite Wisdom which "answered Job out of the whirlwind and said Where wast thou when I laid the foundations of the earth When the morning stars sang together and all the sons of God shouted for joy?" and which taught Isaiah to say, "Of the increase of His government and peace there shall be no end," affirmed again the eternal plan of growth, when the Babe of Bethlehem was announced.

Nothing human is complete. Over and over again we have the miracle of the seed, the first green shoot and the slowly unfolding life. However silent our lips, when our brown fields take up their first green tints our hearts are ready to shout for joy. We do not abandon our tasks because there are enemies in the field. We have an abiding confidence in the ultimate triumph of our efforts, while we work in harmony with nature's laws.



To Greet You

TO you, dear "Farm Home" readers, I send Yuletide Greetings and love. All through the year now nearly spent your friendly letters have been glowing with widespread comradeship, mutual helpfulness and a longing for better things for farm folk and their families.

We rejoice in the hope that each week you are anxious for our visits together. It is our wish to continue sending you through our Home Department some bit of inspiration, some lofty ideal, some new thought, some real vital heart-warming thing to enrich your lives.

May the Christmas Star shine radiantly over your homes and lead you into paths of calm and peace. We re-echo the precious prayer of Tiny Tim when he said, "God bless us every one."

Gertrude S. Stewart.

More and more this abiding confidence means the "increase of His government and peace" which, in our own land and by the steadiest loyalty of our own people, has touched the highest levels known to humanity. That this increase which we inherited may be passed on to our children, not only unimpaired but still further increased, is the great duty and privilege put within our reach at this blessed Christmas time.

Warmth is not the only requirement for comfort in winter. The air in the home should be circulating and should contain plenty of moisture.

A strip of white cloth six inches deep basted along the top of quilts and blankets prevents soil on the edge that comes in contact with the face.

Carrots and Apples

WINTER vegetables need not become monotonous if one takes pains to vary the way they are cooked. Here's a combination of two good foods that can be found in every country storage cellar and on any grocer's counter in the country. Yet, when put together they make a tasty dish that seems like something quite new. This is an excellent accompaniment to roast pork or roast beef—in fact, to any meat dish which gains savor by the addition of cooked apples. The Bureau of Home Economics of the U. S. Department of Agriculture enumerates the ingredients needed.

Six medium-sized carrots, six tart apples, two tablespoons fat, one tablespoon sugar, one-fourth teaspoon salt.

Scrape the carrots and cut them lengthwise into thin slices. Pare the apples or leave the skin on, as preferred, core and cut into slices about a fourth of an inch thick. Place a single layer of the apples and the carrots in a large skillet with the fat, cover tightly and cook until well browned, turn and brown the other side. Just before the cooking is finished, sprinkle with the sugar and salt. Serve on a hot platter, first a layer of carrots, then a layer of apples, so the two can be lifted together.

Joy in Giving

By EDITH D. DIXON

DO you allow your children to make their own Christmas presents? Some parents cannot bring themselves to permit a child to present to others the crude and often absurd things which children decide upon when they do their own planning and making.

But in placing more value on the gift, rather than the spirit of the giver, are we not losing sight of the real significance of Christmas for the child? Because it is the time and effort that he puts into the making of his gifts that really count rather than the intrinsic value of those gifts.

Why not let the child take his allowance, or such money as you are willing to give him, and plan its expenditure? For some persons he may wish to buy outright; for others he can buy materials and make his gifts.

What can be made? You may be tired of the perennial calendar and blotter upon which is pasted a snapshot, taken as a surprise for father. Yet these are simple and practical presents and new ones are needed at least once a year.

The child who has access to firing facilities, can make attractive and inexpensive gifts of such forms of pottery as inkwells and candlesticks.

The child with a jig saw or coping saw can cut animals and other toys from thin wood or heavier board and paint them in bright colors for the young children. Bean bags, iron holders and pen wipers offer opportunities to the child who can handle a needle.

One child made attractive gifts by covering match boxes with fancy wallpapers. Another shellacked round powder boxes and tin coffee cans, and filled them with Christmas cookies and candies.

Children should be allowed to make the trimmings for the tree and the table. This is an excellent way of exercising their taste for color and arrangement. They learn not only to appreciate, but also to create artistic effects. They pass from the desire to put anything and everything on a Christmas tree to producing a beautiful effect by confining the decoration to tinsel thread strung vertically and lighted with white candles or tiny electric bulbs.

In ways such as these the child is getting a joy and satisfaction in connection with Christmas which he cannot experience through merely receiving gifts, no matter how beautiful or how much desired they may be.

Christmas

By L. MITCHELL THORNTON

I've praised the holly of Christmas,
I've shared the folly of Christmas,
Merry and young and gay,
I've eaten the feast of Christmas,
Missed joys, not the least, of Christmas,
Treading a care-free way.

I've heard the story of Christmas,
I've shared the glory of Christmas,
Eager and glad of heart,
I've loved the beauty of Christmas,
Nor shirked the duty of Christmas,
Striving to do my part.

I've learned the meaning of Christmas,
The trend and leaning of Christmas,
"Joy to the world" it brings,
I've learned the blessing of Christmas,
The joy of confessing on Christmas,
The Christ Who is King of Kings.

Thankful for Work

EVENING finds us tired, especially we women who live on farms. Are we apt to fret and complain about the injustice of so much work? How often do we stop to think of work as a blessing? When trouble—real trouble—comes, work is one's salvation. To get out under the blue skies to work and commune with God is the panacea of life. This Christmas season the thing for which I am most thankful is that I am able to work.



Fashions and Styles

Girls' dress. Cut in four sizes. 8, 10, 12, 14 and 16 years. Price 15c or two for 25c.
No. 6807.—Ladies' slip. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. Price 15c or two for 25c.
No. 5536.—A new doll set. Pattern comprising the doll and garments, is cut in three sizes: Small, 12 inches; medium, 15 inches; large, 20 inches in length. The doll requires for a medium size 1/2 yard. The rompers 3/4 yard. The suit and hat, 1 1/2 yards of 27-inch material. Price 15c or two for 25c.
No. 5988.—Boys' suit. Cut in three sizes: 2, 4 and 6 years. A 4-year size requires 1 1/2 yards of 54-inch material. Price 15c or two for 25c.
No. 6330.—Ladies' dress. Designed in size 12 and 14 years. A 20-year size requires 1 1/2 yards of 39-inch material. To trim with bias binding as illustrated requires 1 1/2 yards. Price 15c or two for 25c.
No. 5319.—Dolls' outfit. Cut in five sizes: for dolls, 16, 18, 20, 22 and 24 inches in length. Price 15c or two for 25c.
No. 6005.—Ladies' undergarment. Cut in four sizes: Small, 34-36; medium, 38-40; large, 42-44; extra large, 46-48 inches bust measure. Price 15c or two for 25c.

HOW TO ORDER

All patterns 15c each, two for 25c. Be sure to give number and size. Fashion Book only 10c. Address Pattern Department, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

TWO HELPERS INSTEAD OF ONE IN EVERY BAR
That's why

EXTRA HELP APLENTY IS WAITING FOR YOU IN FELS-NAPTHA

IT'S AS PLAIN as day—the reason why Fels-Naptha must give you extra washing help. For every one of these big, generous bars brings you two cleaners instead of one. Not just soap; but unusually good golden soap and plenty of naphtha.

Naptha, you know, is a remarkable dirt-loosener. You can tell there's plenty in Fels-Naptha. You can smell it! It's there to work with the golden soap. Joining hands, these two safe, active cleaners loosen the most stubborn dirt and wash it away. They make your clothes freshly, sweetly, crisply clean; and they do it quicker, easier—without hard rubbing.

Your hands will enjoy Fels-Naptha's extra help, too. It gets them out of water sooner, and helps keep them nice. Try Fels-Naptha and you'll also agree it's a real washing bargain. It brings you

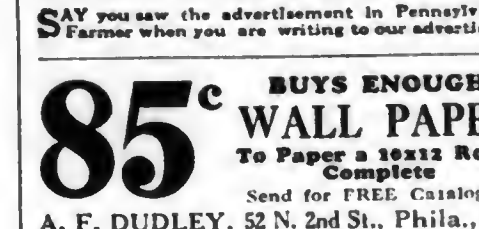
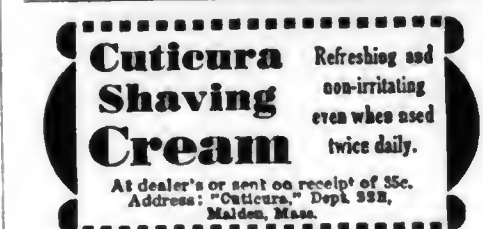
not more bars, but more help. Extra help in tub or machine; in hot, lukewarm or even cool water; whether you soak or boil your clothes.

Get Fels-Naptha at your grocer's to-day. Remember its extra help for household cleaning, too.

SPECIAL OFFER—We'll be glad to send every user of laundry soap a Fels-Naptha Chipper. Many women who chip Fels-Naptha into their washing machines, tubs or basins find this chipper handier than a knife. Use it and Fels-Naptha to make fresh, golden soap chips (that contain plenty of naphtha!) just as you need them. Send only a two-cent stamp to help cover postage, and we'll mail you this chipper without further cost. Write to-day. Dept. 7-12-20, Fels & Company, Philadelphia, Pa.

THE GOLDEN BAR WITH THE CLEAN NAPHTHA ODOR

FELS-NAPHTHA



Harbingers of farm prosperity

AGES, it seems, since we used the top buggy to go to town. Wouldn't think of it now—except for "joy-rides." Ages, too, since Mother sold her kerosene lamps. Yet not long ago—when you figure time by years.

The auto, the lighting plant, the telephone, a dozen other things you now possess, were thought of as luxuries which the average farmer could not buy. Today they are a necessity on every farm. All of them were advertised before becoming universal.

The advertisements in your farm paper are forerunners of farm prosperity. They introduce progressive methods and popularize them. They show how to save time and money.

Read them. Mark those in which you are particularly interested. Tell the dealer what brand you want. Give him the advertised name of the product. It will pay you to buy advertised goods.

Remember that the manufacturer cannot afford to "spot-light" inferior goods. His branded merchandise must meet with your approval—must give you fair quality for a fair price. He must keep pace with progress to insure your—as well as his own—prosperity.

The Young People

Merry Christmas

I AM hoping that every boy and girl of our big family will have a very happy holiday time . . . Write me a short letter and tell me what you did on Christmas and I'll send you a New Year's card. Be sure to write your name and address plainly. Send your letter to Young People's Editor, Pennsylvania Farmer, 7301 Penn Avenue, Pittsburgh, Pennsylvania.

Elsie K. Watson

Christmas in Other Lands

IN the northern countries of Norway, Sweden and Denmark, Christmas celebrations begin at six o'clock on Christmas eve and last till the close of Epiphany day, January sixth.

During all this time, every family keeps open house for friend or stranger according to his means. No visitor leaves a home without eating or drinking with the inmates, lest by his omission of this time-honored rite, he bring bad luck into the home during the coming year.

Since the season is one of such extensive hospitality, the housewife makes many preparations for its arrival. First, she makes a general housecleaning, for the eyes of the guests must see no dirt.

Then there comes the hog-killing to provide ample supplies of cold sliced ham. There is the goose to be prepared, and the fish to be soaked in lye. There is no end of baking. Every family has its big Jule-kake, full of raisins and citron which is cut and eaten in the Christmas room just before the tree is stripped of its gifts. There is an abundance of small cakes (like our cookies) to be stored in jars for callers, and for the youngsters who sing at the doors during the holiday season and expect their pay in treats, not in money.

The Christmas feast takes place on Christmas eve, since Christmas day itself is devoted largely to religious services. This meal has certain fixed



MERRY CHRISTMAS

I LIKE a Christmas tree That's trimmed with tinsel strings And jolly little fixings All made of sparkling things. I like to see it twinkle With all the candles lit, I like my little nose To sniff and smell of it.

finicky serve it for the mid-day meal to get the smell out of the house before the evening ceremonies. In earlier years, another traditional feature of the Christmas eve meal was mush, but that food has been largely done away with even on the servants' tables.

While the family and their guests feast high within the house, the animals without are also well provided with food. At this season, it is the universal custom to give the farm-stock a double supply of fodder, in memory of the scene at the Bethlehem manger. A dish of mush and milk must be placed outdoors for the Christmas elf Julenissen (or Jule-Toomten) who will send bad luck to the homes where either he or the livestock under his protection are slighted. Although the head of the house may realize that he is feeding the rats when he puts out provision for Julenissen, yet he is loath to break the age-old tradition handed down to him by his fathers.

Look After the Poor

The birds, too, must have their Christmas treat. Everywhere you see a sheaf of grain hanging out on a pole by the side of a house. If a farmer forgets to save a sheaf for this purpose, he gets one from a neighbor. The people in the city remember to buy the sheaf when they purchase the Christmas spruce. The birds, too, must feel the season of gift-giving. It is considered not only a sign of a stingy nature to omit such bounties to the lower creation, but it also invites bad luck to the family. Julenissen, moreover, will not remember with gifts a home where such preparations are lacking.

Christmas eve is the time for large charity-dinners for the unfortunate families who might otherwise be in need. Scandinavian countries are reputed to have been the first in giving the Christmas dinners to the poor.

In order that the men of the family may be able to spend Christmas eve with their families, the stores close at six o'clock. All the church bells have been ringing for the past

hour as a preliminary for the beginning of the Christmas festivities.

After the supper is eaten, the procedure is the same in cottage or great hall. The Christmas room, which has been secretly decked during the day, is opened to the gaze of the youngsters. The traditional candles are everywhere. No electric lights appear in the room. In some sections, the gifts are given from one member of the family to another with no thought of a personage like our Santa to be expected.

Masquerade Visits

In other parts, however, the Christmas elf Julenissen may appear to help distribute the gifts. He is represented as a tiny man scarcely a foot tall, dressed in grey, with a red cap, long white whiskers and extremely homely. In some parts of the North, it is believed that each home has its own Julenissen who lives with its own family and moves with them, that his retreat is in the attic or in the stable. Other parts look on him as an occasional spirit who comes in Christmas visitation only and has but one self for everybody. In such sections they teach the children to believe that he runs from house to house with a Christmas-tree on his back, that he knocks at the door, shouts "Juleklappe" and leaves the gift before he can be seen. In imitation of this fanciful elf, you may see people knock at doors, deposit their gifts, give the

Christmas greeting and disappear before the door is opened.

Christmas sports are given and may be enjoyed any day of Christmas-day which is strictly religious. There is often a taking hold of hands in the of ring-around-the-rosy. There be a masquerade-visits (Julebok) which causes lots of making. The young folks dress in strange clothes with masks and calls on their friends who cover the identity of their There are parties and big carol-singing.

The religious element of the however, must not be overlooked. There are two church-services day before Christmas; there is on Christmas day and every tends at least two. There is prayer-service at six or seven is a sermon-service at eleven, evensong service at five. All are usually packed to the end of the Christmas Epiphany day on January is another extra church-service.

ON THE COVER

"Twice the night before Christmas all through the house Not a creature was stirring, not a mouse . . ." was written by Clement Moore, of his boyhood home appears at this week. It was in this house received the inspiration for which has delighted children and men time for these many years.

Little Folks' Corner

A Narrow Squeak for Timmy Twitchet

By RUTH PLUMLY THOMPSON

TIMMY TWITCHET was entertaining over the week end. Yes, several out-of-town visitors were to spend Sunday with the Mouse Mayor in his old homestead in the attic. Although Timmy was a mouse, he never did anything in a small way and he and his mouse-housekeeper after many anxious conferences in the old doll house kitchen made out a long



list of the provisions necessary to provide his guests with unusual and appetizing repasts during their short stay.

With the list in his pocket, and an old tobacco sack over his shoulder, Timmy set out late Thursday evening to do his marketing. Timmy's home and the mouse village where he lived, as many of you already know, was in

the attic of an old-fashioned Philadelphia. Between the under the floors, the mice had ed a splendid and efficient subways and elevators, so could reach the lower rooms house without detection or licence, and avoid the steep gerous stairways of the Nodding to the elderly mouse ran the elevator to the kitchen my whistled softly to him mind full of coffee beans and er crumbs.

"Be careful," warned the mouse as Timmy stepped into the big white kitchen. "about, and the cook not yet. Better wait till the light Timmy, my boy."

"I always come back," grinned the Mouse Mayor, elevator mouse a friendly "Don't worry about me. Don't worry about me!" head disapprovingly. Samuel Timmy saunter carelessly into kitchen and disappear into the part of the dresser. Timmy little wooden steps the mice for themselves. Timmy Twitchet reached the shelves where the of cereal and crackers, the coffee, tea, flour and sugar was

(To be continued.)

PASSING EVENTS IN PICTURES



1. Lake Elsinore, Cal.—The fastest pilots from the East and West met in competition for these beautiful trophies in the third annual National Mid-Winter Outboard Chumpling-ship Circuit, the finals of which were held here December 6. Photo shows Miss Agnes Barth with the trophies. At the upper left is the Maccate cup. In upper right is the Mackay trophy and at the lower right is the Sludowpoint trophy.

2. Herts, England.—A view of the giant Handley-Page, 40-seater airplane, the world's largest land plane, compared with a tiny Fiesch-Mach machine at the Radlett Airfield here where the great ship made her first test flight. It will operate between London and Cape Town South Africa.

3. Chicago, Ill.—George K. Spoor, inventor of the much talked of Spoor-Bergen Natural vision film. The first showing was made last month.

4. Action galore! An excellent shot showing a veteran skier making an intricate jump-turn at St. Moritz, Switzerland.

5. Chicago, Ill.—The old brush and bucket method of washing cars has been replaced on the North Shore Line by a modern laundry which turns the cars out "spic and span" in record time.

6. Pasadena, Cal.—Pretty Mary Lou Wadell, 18-year-old brunette who was selected queen of the Tournament of Roses to rule over the famous floral sports in New Year's Day during the tournament and the East-West football game.



FOX POULTRY FARM

August 20, 1930

Very truly yours,

Lewis L. Fox

**FEEDS THAT DO NOT VARY
FOR POULTRY - HOGS—DAIRY**

READ THE ADVERTISEMENTS TO KNOW WHAT
IS BEST AND WHERE TO BUY

May this Christmas Spirit come to us all, and some measure of it, at least, abide with us throughout the

Ask to see the "Ulica-Knit" Sleeper for your children's protection.

KERLIN LEGHORN CHICKS
40-page book free—Describes—quotes low prices, "Kerlin Quality"! Trapped, Contest Winners. Greatest winter layers. Disease free. Highest quality. Low cost. Free feed with chick order. Big

Mr. Hans Hansen of Grund
a particularly attractive pas
is that the plots were all

of nitrogen in addition to the mineral treatment the increases per acre were 453, 505 and 583 pounds respectively, for the three levels of cattle in the test plots.

"And thousands of poultrymen have found their flocks didn't reach *top production* until they fed BULL BRAND"
- says Uncle Charlie

A County Record of 81.3% Lay
Lester Waldron of North Creek, N. Y. says: "I began feeding B-B Laying Mash early last spring and during the month of April made a county (Warren) record of 81.3%." Poultrymen continually praise the uniform quality of B-B feed. No wonder. Made in one of America's largest and finest equipped mills, of choicest ingredients and with every manufacturing process under the most rigid inspection, each sack of B-B feed is just like every other sack. That's why we guarantee results.

You can make this test without any risk. Ask your dealer for enough B-B Laying Mash *vitaminized with Cod Liver Oil* and B-B Scratch Feed to last one pen for 30 days. (Write to me if your dealer can't supply you.) At the end of the test period compare the egg production, the condition of the birds and the feeding cost. If you don't find that B-B has given you most eggs per dollar of feed cost take the empty bags back to your dealer and he'll return your money without question.

Practical poultrymen tell us they have never seen so much good sound information as is packed into our 64-page book, "Making Poultry Pay a Profit," written by Prof. L. N. Gilmore, of Syracuse University. We would like to send you a copy free. Just fill out and mail the coupon below.

MARITIME MILLING Co., Inc., Buffalo, N. Y.

"UNCLE CHARLIE,"
Care of MARITIME MILLING CO., INC.,
1109 Chamber of Commerce Bldg., Buffalo, N. Y.
Send me at once a copy of Professor Gilmore's 64-page book, "Making Poultry Pay a Profit." There is no charge or obligation to me.

Name _____
Street or R. F. D. No. _____
City _____ State _____

BABY CHICKS
and **DUCKLINGS**

of best quality. Postage paid and insured. **Guaranteed!** A healthy chick or duck sure to start you on the right path to a profitable spring delivery to broods.

Write for our **Catalog free.**

NABOR POULTRY FARMS, Box 22, GAMBER, OH.

Truslow
Chicks

Write today.
It's FREE.



Result of 49 Years Breeding
Let me also give you a book telling about w...
...dustful egg and...
...producing stock—about...
...and high egg production. T...
...about controlling conditions.

TRUSLOW POULTRY FARM, Inc.
Box P. 12, Chestertown, Md.

LOTS OF EGGS and — BIG EGGS

Hoytville Accredited White Leghorns have been bred for over ten years to produce big eggs and lots of them. Get our free catalog. It tells all.

10 FREE CHICKS

Order before March 1st. Get 10 free chicks (with each \$10.00 down box order). Pay when you get chicks. It's a money tree catalog!

HOYTVILLE ACCREDITED HATCHERY,
Hoytville, Ohio
149 Main Street

WALCK BABY CHICKS

40,000 WEEKLY

Barred and White Rocks, White Wyandottes, Reds, Black Giants, Anconas, Brown and Main White Leghorns. Birds culled by Lloyd Baker, State College graduate; also ten years' experience on the land, modern equipment and had 21 years' experience. Our prices and terms are reasonable. Write for catalog and early order discount.

WHARTON
High Quality CHICKS

HIGH QUALITY CHICKS
Quality higher and prices lower.
Breeding birds selected and leg-
banded by expert fuzilors. Lay
horns, 11c each; Rocks, 10c each;
Wyandottes, 13c each; Light
Orpingtons and Black Giants, 15c
each. Write for free catalog and
special prices on large orders.

Wharton Hatcher, Co.
Box 109,
Wharton, Ohio


Wolf-Certified Chicks
AT REGULAR PRICES

PREPARED CATS DOBBERING 2 popular
plumable breeds in beautiful, mature
quality. It does Not Wolf-Certified
Chicks which will be a bigger profit
for 1993 year, no more to buy.

WOLF Hatching & Breeder
Farms

GINSENSHAW, OHIO Sept. 14

CATALOG IN COLORS • FREE

 **NABOB** **BABY CHICKS**
and DUCKLINGS
of best quality. Postage paid and insured. Arrivals Guaranteed. A fresh stock. Be sure to get our BIG DISCOUNT early spring delivery. to breeders.
work all year on chicks for sale. Catalog free.
NABOB POULTRY FARMS, Dpt. 22, GAMBIER, OH.

Truslow
Chicks

Result of 49
Years Breeding

Let me give you a book telling about a wonderful race and producing stock—about broilers and high egg production. Tell about controlling coccidiosis.

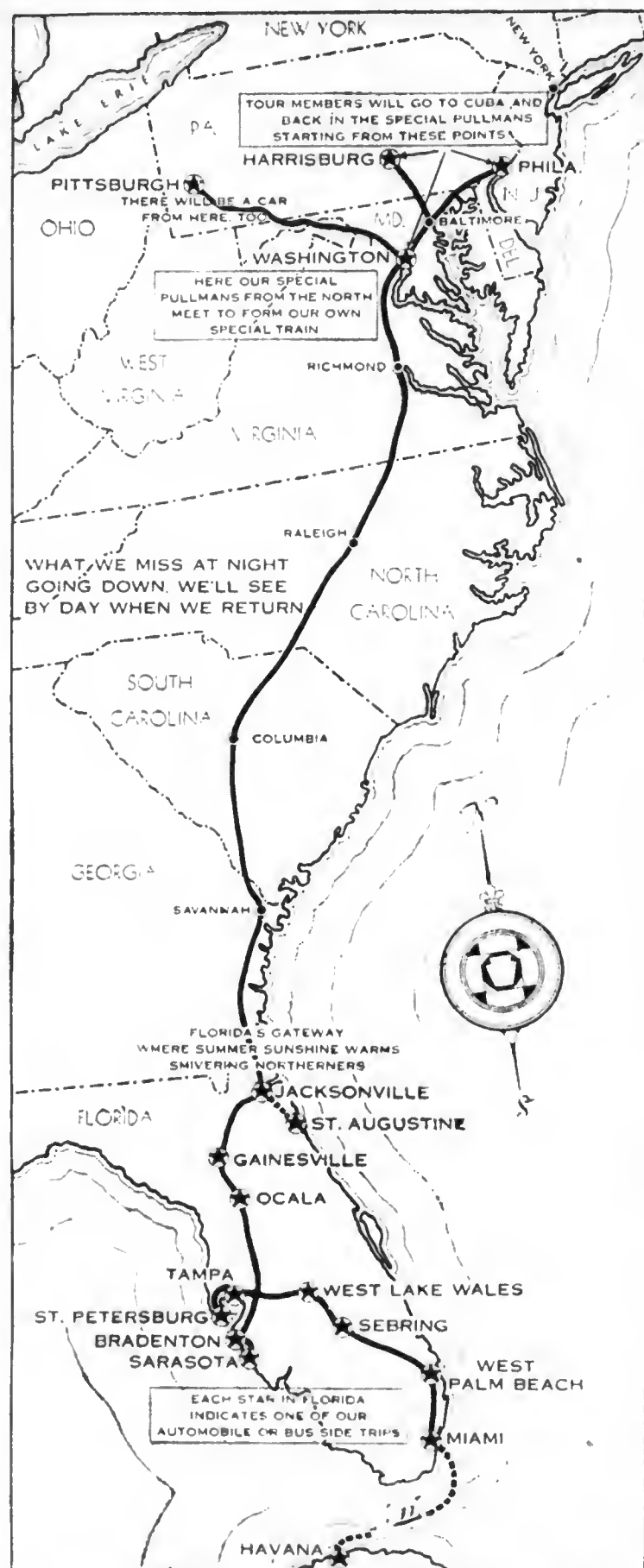
TRUSLOW POULTRY FARM, Inc.
Box P 12, Chestertown, Md.

Write today.
It's FREE.



TO MAKE A STUDY IN STILL LIFE

LEETD



Now It Is Your Turn

HERE is your opportunity to see this great country of ours at low cost—to explore balmy Florida while it is winter at home—to make an ocean voyage on the blue Caribbean—to visit a foreign country.

The Pennsylvania Farmer Florida-Cuba Tour is just a friendly, care-free sort of a trip for Pennsylvania Farmer readers, their families and friends.

The cost is surprisingly low, due to the advantages of group travel. The accommodations are the very finest—and the meals are the best you ever ate.

You pay the total cost in one lump sum before you go—then you can leave your pocketbook at home.

No fussing about tickets, trains or hotels. Everything will be arranged in advance for you. Some one else will pay all the bills, give all the tips—and do all the worrying. Nothing for you to do but enjoy yourself.

If you have never traveled before, this trip will be the treat of a lifetime. If you have traveled extensively you'll appreciate even more the worry-free comfort and economy of this pleasant vacation adventure.

Sponsored in cooperation with
 Seaboard Air Line Railroad
 Clyde-Mallory Steamship Lines
 R. F. & P. Railroad
 Also, Pennsylvania Railroad
 Baltimore & Ohio Railroad

A WINTER VACATION Tour TO FLORIDA AND CUBA ..

conducted by the

Pennsylvania Farmer

February 3 to 14, 1931

SEE ..

The magic boom cities of Florida
 Majestic royal palms—curious banana trees
 Orange and grapefruit groves at picking time

ENJOY ..

Bathing in the Gulf of Mexico
 Exploring Spanish fortresses in old Havana
 Visiting with Florida's winter farmers
 Fruit and flowers and berries, while winter rages at home
 The thrill of landing in a foreign port—then returning to the good old U. S. A.

Special cars
 starting from
 Harrisburg
 Philadelphia
 Pittsburgh
 Washington,

Mail the coupon now
 and get full information
 by return mail

Tour Manager, Pennsylvania Farmer,
 7301 Penn Avenue, Pittsburgh, Pa.

Please send me without cost or obligation the 16-page illustrated booklet giving full details and cost of the Florida-Cuba Tour. A13-12-30

Name
 Town
 RFD. County

PENNSYLVANIA FARMER

Published
Weekly

Established
1877

Consolidated with PENNSYLVANIA STOCKMAN and FARMER

December 27, 1930



Description and Pictures of Florida-Cuba Tour--Pages 9 and 13

Farm Facts and Fancies

By ALVA AGEE

THE end of the year comes more quickly than it once did. That is just as well, because one needs a new year to encourage him to accomplish more and to sidestep the effect of failures that need not have been. Then there are the necessary ones that may not be repeaters. Anyway, the most of us like a new year.

Probably nine-tenths of our readers do not like the financial headway of 1939. Some of the headway was in the wrong direction, and when in the other it was running in low gear. A great part of the difficulty was beyond any man's control. Commodity prices have been going down, the world over, and when that is occurring times are not good.

When taking stock this January we might as well let this factor bulk as large as it is. There is nothing in trying to fool oneself. That downward trend in prices has a numbing effect on human effort to get along. It is making the present depression more serious than people anticipated. On the other hand we have a lot of hope in stock, as our inventory shows, that seems soundly based. This sort of a thing has happened time and again in the past, and the record shows that when matters reached about where they are at present the turn came, and then came the climb upward.

Continuing decline in prices of basic commodities plays the mischief. It cuts down purchasing power of the people, reducing the level of well-being, it checks normal purchases of supplies in industry because lower prices are looked for, it reduces the demand for labor and it gets all or its into the dumps. The men I believe in think the decline is near bottom, and when all of us think so there will be a better financial prospect before everybody. Always there is recovery, and in my stock of hope is the reasonable certainty that this coming new year will bring us the start in recovery.

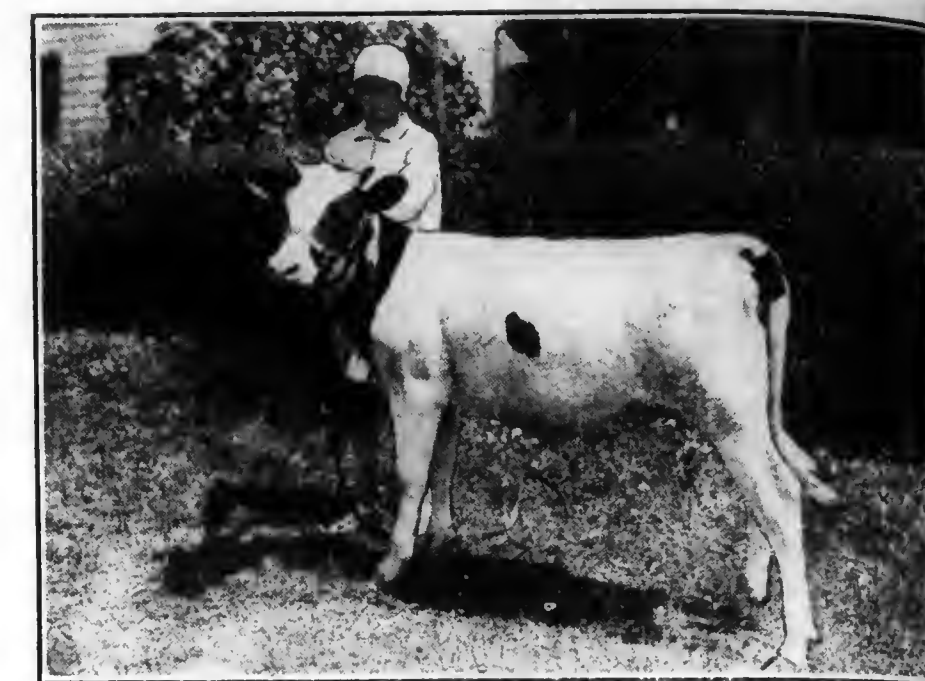
We like an alibi when responsibility for some failure is being sought. Very easily we may overemphasize the things over which we have no control. There are burdens the farmers could have out of the way if they were minded to do so. Grossly unfair taxation is one of them. No influence could stand against the united determination of farmers that every man was to share in cost of government according to his ability to provide for himself. The property tax would be made a minor feature in taxation, used only as justice demanded, and an income tax would be the chief source of the government's revenue. Then if the public wanted lavish service to itself, it would know where the burden of cost would rest. It would be a great gain to farmers if they contributed only in proportion to income. The farmers could win in securing justice if they were dead in earnest.

The scheme to provide funds for long-time loans to farmers through land banks was one of the best things ever devised. Either the law was not tight enough or federal supervision was faulty. I learn that there is continual inability to sell bonds and make these loans. If this situation had arisen in our ordinary banking system, a remedy would have been found quickly enough. There is financial ability in our government to put matters on such a basis that tax-free bonds would find a market because they were safe, and money would flow in for use of thousands of our readers who should put their debt into a lump sum at a low rate of interest and

nearly a life-time to repay it. This service can be rendered.

But we need to come nearer home in this stock-taking. A member of the association of owners of homely farms writes that matters are not going so badly with them in comparison with what they read of others. Economy has a harsh sound for a word taken from a classical language. I reckon New England hasn't tried to soften it any as it passed the word along. Now, I will come in for criticism the moment I bring this matter up, but the association I have mentioned is sure that the lavish living of the public outside of agriculture a year or two ago influenced many people who are dependent on land for income to buy on the installment plan when such buying does not fit into the farming scheme. This association says that it is better to turn in and wear clothes out the second time than to buy except for cash. I pass it on for whatever it is worth. This advice to spend money to make times better for others is not as good as it sounds. We do not need it.

Some of our conservative corporations have what are called "hidden assets"—values not listed in the statement of assets. So in farming, if the farming is good. The chances are that the land is a little more productive than it was five years ago. Improvements have been made in various ways, and the farmer knows more. All that is increase in capital and earning power that one inclines to overlook. This is no year to overlook any sort of gain. It is needed to help



Pride of ownership and skill in showmanship bring worlds of satisfaction to Union county, Pa., club girl

keep courage up. And they are assets of a dependable sort. A good farmer is worth a little more to his farm, his family and himself each year. Maybe you will say that it is a poor year in farming that causes one to emphasize such a gain. Maybe so, but the fact is that it is the best gain of all.

A call just came over the phone from a man who wants to borrow ten dollars over the week-end. Every now and then comes this request from him, and of course he always repays the loan or I wouldn't have the money to let him have. It is a revolving scheme he seems to have worked out. He is a college-trained man, and has been a salesman on commission for a company that markets what many

regard as a necessity but is really only a luxury. The result is that the last year he has been only a jump ahead of necessity and he loses time looking back to make sure the jump is long enough. He was nearly a stranger when he asked me the first time, but now we seem to understand each other. Each hopes the other will stay well, and when we say, "How do you do?" we mean it.

I am mentioning this to say that this man can assure any one who has a farm and a family and friends and health and not too much debt that he is in no position to realize the anxiety of one who simply must have ten dollars and is not certain whether he can get that amount to tide over the week. And he would be right about it.

Little Folks in the Dairy Herd

By A. A. BORLAND

WHEN skim milk is available the problem of raising calves is comparatively simple. Whole milk is fed three times daily for the first week, allowing about one quart at a feed to Jersey, Guernsey or Ayrshire calves and about one and a half quarts to Holstein or Brown Swiss calves. During the second week the feedings may be reduced to two daily, allowing Jersey calves about two quarts at a time and Holsteins two and a half quarts.

Beginning with the third week, skim milk may gradually be substituted in place of the whole milk, taking about a week to make the complete change. After this the amount of skim milk may gradually be increased until at the age of three months the calf is being fed four quarts of skim milk twice daily. If skim milk is available its feeding may be continued until the calf is six months old.

Hay and grain feeding may start as soon as the calf will eat them, usually at two to three weeks of age. Clover hay is especially good for calves and should be supplied fresh in small amounts daily. The grain is best fed dry. Begin by putting a handful in the bottom of the pail when the calf has finished drinking its skim milk. An appetite for grain soon develops and the calf may then have a small regular allowance amounting to about a half pound daily when a month old and increasing to one pound daily at the age of two months and

two pounds at the age of three months.

A good grain mixture to go with skim milk consists of three parts of cracked corn, three parts of ground oats, three parts of wheat bran and one part of linseed oilmeal. After skim milk feeding ceases the grain mixture should be changed so as to increase the protein content. A suitable mixture at this period would be equal parts of cracked corn, ground oats, wheat bran and linseed oilmeal.

If Skim Milk Is Not Available Where skim milk is not available calves may be raised with a fair degree of success by several different methods.

The minimum milk plan is that in which the calf is given a good start on whole milk for about two months, meanwhile being fed liberally with grain and hay. At the end of eight to ten weeks milk feeding ceases entirely and the calf thereafter subsists on hay, grain and water.

Ready mixed calf meals are available on the market. Home-made calf meals can also be made up by the dairyman.

Raising Calves on a Dry Mixture Recently work by Dr. S. I. Bechdel at the Pennsylvania Agricultural Experiment Station and by investigators elsewhere has demonstrated that calves can be raised satisfactorily on a dry mixture after they are five weeks of age.

Pounds of Feed per Day			
Age	Whole Milk	Grain & Milk Powder Mixture	Clover or Mixed Hay
1 to 3 days	with dam	0 to 0.5	0 to 0.5
3 to 11 days	6 to 11 lbs.*	0.5 to 1.0	0.5 to 1.0
2nd week	14 to 18 lbs.*	1 to 1.5 lb.	All they can eat.
4th week		2 to 3 lb.	All they can eat.
6th week		3 to 4 lb.	All they can eat.
8th week		4 to 5 lb.	All they can eat.
10th week		5 to 6 lb.	All they can eat.
12th week		6 to 7 lb.	All they can eat.
14th week		7 to 8 lb.	All they can eat.
16th week		8 to 9 lb.	All they can eat.
18th week		9 to 10 lb.	All they can eat.
20th week		10 to 11 lb.	All they can eat.
22nd week		11 to 12 lb.	All they can eat.
24th week		12 to 13 lb.	All they can eat.
26th week		13 to 14 lb.	All they can eat.
28th week		14 to 15 lb.	All they can eat.
30th week		15 to 16 lb.	All they can eat.
32nd week		16 to 17 lb.	All they can eat.
34th week		17 to 18 lb.	All they can eat.
36th week		18 to 19 lb.	All they can eat.
38th week		19 to 20 lb.	All they can eat.
40th week		20 to 21 lb.	All they can eat.
42nd week		21 to 22 lb.	All they can eat.
44th week		22 to 23 lb.	All they can eat.
46th week		23 to 24 lb.	All they can eat.
48th week		24 to 25 lb.	All they can eat.
50th week		25 to 26 lb.	All they can eat.
52nd week		26 to 27 lb.	All they can eat.
54th week		27 to 28 lb.	All they can eat.
56th week		28 to 29 lb.	All they can eat.
58th week		29 to 30 lb.	All they can eat.
60th week		30 to 31 lb.	All they can eat.
62nd week		31 to 32 lb.	All they can eat.
64th week		32 to 33 lb.	All they can eat.
66th week		33 to 34 lb.	All they can eat.
68th week		34 to 35 lb.	All they can eat.
70th week		35 to 36 lb.	All they can eat.
72nd week		36 to 37 lb.	All they can eat.
74th week		37 to 38 lb.	All they can eat.
76th week		38 to 39 lb.	All they can eat.
78th week		39 to 40 lb.	All they can eat.
80th week		40 to 41 lb.	All they can eat.
82nd week		41 to 42 lb.	All they can eat.
84th week		42 to 43 lb.	All they can eat.
86th week		43 to 44 lb.	All they can eat.
88th week		44 to 45 lb.	All they can eat.
90th week		45 to 46 lb.	All they can eat.
92nd week		46 to 47 lb.	All they can eat.
94th week		47 to 48 lb.	All they can eat.
96th week		48 to 49 lb.	All they can eat.
98th week		49 to 50 lb.	All they can eat.
100th week		50 to 51 lb.	All they can eat.

* Gradually decreased.

UNADILLA SILOS

Made Famous by the Men Who Own Them

Every dollar put into a Unadilla—both in roughage and construction—comes back to you many times during its long life. That's why successful dairymen praise the Unadilla and buy it again and again. If you aim to make more money in dairying, and to pay the least for the most convenience and service—buy a Unadilla—the safest, strongest, most efficient silo of them all. Makers of tubs, tanks and vats. Unadilla Silo Company, Box P, Unadilla, N.Y.

SWINE

Best of Poland-Chinas. Special. Write for description of service boars, bred for sale. C. S. Eppley, Zanesville, Ohio.

TYPE POLANDS, young boars and sows, 3 weeks old. \$4.50 to \$5.00 according to size. Stanley Short, Cheswood, Del.

Berkshires Grand old pigs mated, bred girls, service boars. \$10.00. W. DOZZER, Rossville, Ohio.

MINIATURE PIGS and BRED OILTS, both of pure blood. \$10.00. C. E. Bell, Millersburg, Ohio.

CHOICE PIGS, original Type, Price \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Pedigreed Chester Whites, 10 weeks old, \$10.00. C. E. Bell, Millersburg, Ohio.

Wh. Pigs 10 weeks old, \$4.00. Feeders' choice. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

Big Type, Chester Whites, all ages. \$10.00. C. E. Bell, Millersburg, Ohio.

What Our Readers Say

Big Squashes

I have handled the resulting manure. It's very bad stuff. It gives off a sickening strong odor which is almost unbearable. This odor is tannin or tannic acid, if I'm not mistaken. This tannin is an astringent (medicine for man) but it is of no benefit to crops. Sawdust manure finds no takers here. It was better to spend the time hauling pulverized limestone which is of the greatest benefit to crops and which can be bought at quarries at \$2 the load.

Sawdust is harmful by itself and it is of known use only when it is mixed with earth in equal quantities and then left to rot for several years. The result of such a mixture will be like the ground about an old wood pile or chopping place to which chickens have access. Scratching mixes the two. This is good for forcing plants. Some houses recommend such earth for certain plants. But, after all is said and done, play safe and let the sawdust rot. Don't use it as a manure. R. I. Weigley, Lebanon county, Pa.

I HAVE read about the big squashes. I raised three squashes. One weighed 57 pounds. Mrs. Marjorie Fisher, Jackson county, W. Va.

A Lamb Record

I SAW in the issue of November 22 something about a champion lamb grower. That was very good, but I think I can go some better.

I have ten ewes that raised 20 lambs. Had 22 but one was deformed and one died with lockjaw when castrated.

The 20 at 117 days old averaged 78 1-5 pounds, averaging for each ewe 156 2-5 pounds of lamb. When we sold the lambs we weighed the ram that sired them. He was 16 months old and weighed 206 pounds. Chas. E. Knepper, Huntingdon county, Pa.

A Tomato Experience

WE have a small greenhouse in which I raised lettuce last winter. Three tomato plants came up in the soil among the lettuce. I transplanted these three plants after the lettuce was removed, placing one at each of three greenhouse supports.

These plants had a fair crop of tomatoes about July and then stopped bearing. Just as an experiment I dug a small trench around each plant in which I spread a liberal supply of 4-12-4 fertilizer and washed it into the soil with a thorough spraying of water. I also applied some nitrate.

To my surprise these plants which were apparently through bearing took on a new lease of life and were soon covered with blossoms. The vines also grew in length and have been producing ripe tomatoes over a period of three months or more.

At the present time (Dec. 6) one of the vines measures 15 1/2 feet in length and has more than 150 green tomatoes on it. The other two vines are almost as large. In fact the second crop was many times greater than the first crop. Has any other reader had a similar experience?

H. L. Donnell, Allegheny county, Pa.

Sawdust for Fertilizer

M. A. BROWN of Blair county, Pa., in Pennsylvania Farmer of December 6, asks if sawdust is of any value for fertilizer?

The sawdust you mention should not be applied as fertilizer. Such sawdust is poisonous to all growing plants. This is not only what I have learned about it, but it is the opinion of sawmill operators and owners of large tracts of woodland. They should know.

I have been about stables where sawdust was used for bedding and

I have handled the resulting manure. It's very bad stuff. It gives off a sickening strong odor which is almost unbearable. This odor is tannin or tannic acid, if I'm not mistaken. This tannin is an astringent (medicine for man) but it is of no benefit to crops. Sawdust manure finds no takers here. It was better to spend the time hauling pulverized limestone which is of the greatest benefit to crops and which can be bought at quarries at \$2 the load.

Sawdust is harmful by itself and it is of known use only when it is mixed with earth in equal quantities and then left to rot for several years. The result of such a mixture will be like the ground about an old wood pile or chopping place to which chickens have access. Scratching mixes the two. This is good for forcing plants. Some houses recommend such earth for certain plants. But, after all is said and done, play safe and let the sawdust rot. Don't use it as a manure. R. I. Weigley, Lebanon county, Pa.

I HAVE read about the big squashes. I raised three squashes. One weighed 57 pounds. Mrs. Marjorie Fisher, Jackson county, W. Va.

A Lamb Record

I SAW in the issue of November 22 something about a champion lamb grower. That was very good, but I think I can go some better.

I have ten ewes that raised 20 lambs. Had 22 but one was deformed and one died with lockjaw when castrated.

The 20 at 117 days old averaged 78 1-5 pounds, averaging for each ewe 156 2-5 pounds of lamb. When we sold the lambs we weighed the ram that sired them. He was 16 months old and weighed 206 pounds. Chas. E. Knepper, Huntingdon county, Pa.

What Is the Remedy?

THE subject of taxation is in the limelight and I wish to express a few thoughts on it. For example, A and B each have accumulated \$50,000. A invests his savings in U. S. bonds which are non-taxable and bear interest at 4 1/2 per cent, or \$2,200 per annum.

B invests in tangible taxable property which is taxed about 2 per cent, or \$1,000 per annum. He may or may not be able to realize 4 1/2 per cent on his investment. Both get into trouble with a foreign power and the government has sworn to protect and defend them to the fullest extent of its ability. B pays the government \$1,000 for his protection, but A goes free. Is it fair?

Another: C owns a farm valued at \$3,000 on which he pays a tax of \$60 and at about the same rate on all personal property he may have. He drives a cheap car and has to live economically, denying himself and family of many of the pleasures of the present day in order to make his expenses and pay the tax. D drives a better car, lives in comfort and pays no tax except a small poll tax and a little on personal effects, again is it fair? A Subscriber, Wood county, W. Va.



Remarkable Low-Cost ONE-GUN Power Outfit

The BEAN Little Giant Duplex gives the power of limited acreage with the benefits of spray, high-pressure power spraying at amazingly low cost. Built with BEAN 2-cylinder pump, and has a capacity of

6 gallons 300 pounds pressure

—sufficient to do good work with a spray gun or supply two rods. Simple, sturdy, compact, dependable, lightweight. Complete with Porcelain-lined Cylinders, Patented Pressure Regulator, Threaded Ball Valves, Rotary Agitator, Eccentric Drive, Timken-equipped BEAN Special Cushman Cub 3 h. p. Engine (with Wico magnet) and many other features. BEAN quality all the way thru. Send the coupon for full information.

JOHN BEAN MFG. CO.

DIVISION OF FOOD MACHINERY CORPORATION

25 Howe St., Lansing, Mich.

255 W. Julian St., San Jose, Calif.

Gentlemen: Send me full details of the Bean Low-Cost One-Gun Power Sprayer.

Name _____

Address _____

Penshurst Man O'War

The Ayrshire Sire Supreme

His first eleven daughters average 10,266 lbs. Milk 4.18%

Special Christmas Offering

Ten good cows at \$250.00 each.

Bull and heifer calves at farmer's prices.

Herd fully accredited, free of tuberculosis and abortion.

PENSHURST FARM

NARBURTH, PA.

Reference: Citizen's State Bank, Milford, Ind.

WHITE TO THE

Milford Robe & Tanning Co.

207 Elm Street, Milford, Ind.

Hogs Need Warm Water

Your hogs must have clean, warm water in winter. It is essential for their health and for the quality of their products.

THE HARBOR CO., 809 N. Ave., De Moines, Ia.

TANK HEATER

BURNS OIL

Keeps any tank, Burn 10 to 15 hours on 1 gal. kerosene. No smoke, no odor, no soot.

85c WALL PAPER

To Paper a 10x12 Room

Complete

Send for FREE Catalog

A. F. DUDLEY, 52 N. 2nd St., Phila., Pa.

SHEEP

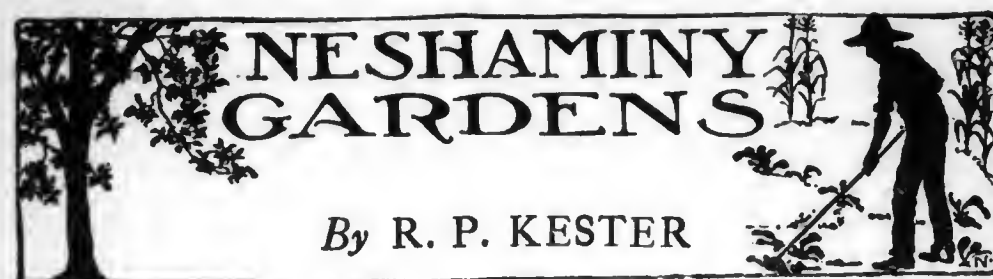
REGISTERED SHROPSHIRE. Choice ewes bred to an extra good, thick fleeced ram. Priced low.

A. F. MERRELL, Geneva, Ohio

For Sale

Rams of heavy C type Delaine Merino, Mutton and Wool Farm

Uned. Lee R. Scott & Sons, Burgettstown, Pa.



By R. P. KESTER

While, at least by hearsay, that apples would keep the doctor away. But it has been discovered just lately that they will keep the wolf away also. During the last few weeks thousands of men in the cities of the East have been depending on the retail sale of apples on streets to live and keep their families. I was in Philadelphia yesterday and apple sellers were more plentiful than Salvation Army kettles, red-coated Santa Clauses or Christmas seal sales. Every street corner showed one, and on the busiest thoroughfares there would be several between crossings, and all seemed to be doing a land-office business.

People who never had the habit of eating apples are buying and eating them now in the name of charity. Men who never sold anything before in their lives are finding themselves doing a successful retail sales business. I spoke to a man who had just bought five apples from one of these men and he told me that he had bought and eaten more apples the last three weeks than he had in three years before.

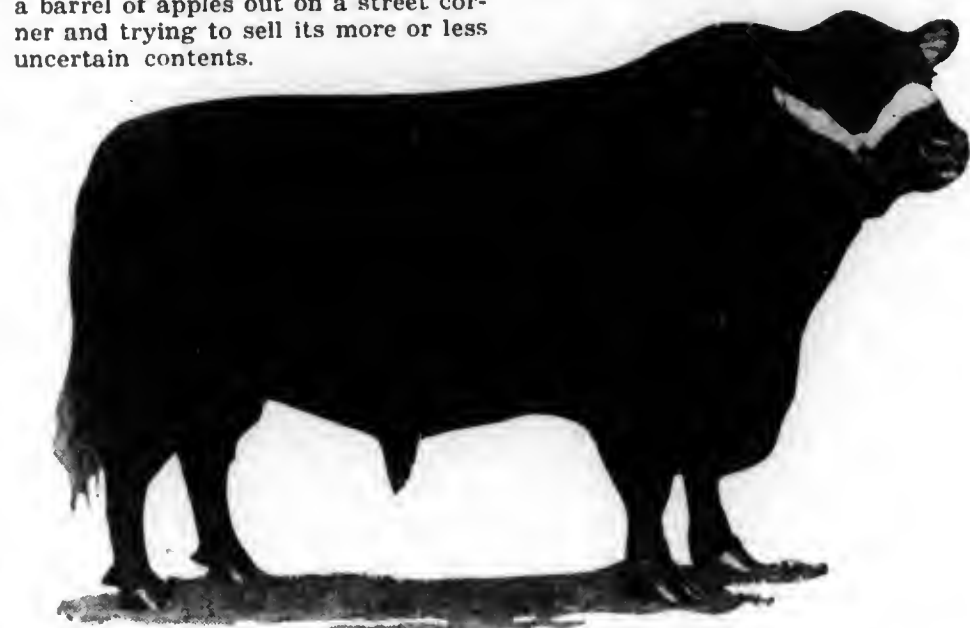
But eastern apple growers are a little grumpy about this matter and are muttering because the apples which are being sold on the street corners in such wholesale quantities are Pacific Coast apples. They are resentful of the fact that trainloads of fruit are being brought three thousand miles and exposed for sale right under their noses in the most popular distribution of apples this country ever saw. Well, let us examine the question impartially.

I don't know whose brain conceived the bright idea of this method of at once providing incomes for unemployed men and of disposing of large quantities of apples. Maybe it was a public-spirited philanthropist; and again maybe it was an apple grower. If it was the former, he no doubt lived in the East. But if the idea came from the brain of an orchardist, I'll bet my last year's straw hat that he lived on the Pacific Coast. Eastern apple growers never have shown any marked ability in the matter of popularizing their fruit and increasing their sales.

Now I know that last crack will be resented, and I am willing to be shown that I am wrong. But I have followed fruit growing in the East for twenty-five years, both practically and theoretically. I have attended scores of meetings in all the eastern states and heard lectures by experts on every phase of the business from planting to marketing. But after all this, and in spite of the great necessity for modern marketing methods, most of the eastern apple growers are still going it alone, and complaining because they cannot compete with a whole section of the United States that is thoroughly organized and standardized, even when that section is three thousand miles away.

As I walked along the streets and looked at the apples exposed for sale I was struck with their uniformity in size and color. You need not walk around seeking to find the best buy. They were all best. Walk through the streets of New York City and you will find them identical with those in Philadelphia. The last apples in the box are just as fine and uniform as the first layer. They are put up in boxes of uniform size and shape, and the boxes bear the name of the locality and the sales organization.

Secretaries of Agriculture, Dr. Jordan of New Jersey, have made official protest to the city authorities in this matter, pointing out the fact that just as fine fruit, and fruit of better quality, is grown right here in the East, and that it is unfair to promote the sale of apples from distant localities. But their protests availed nothing. The western boxed apples appealed because of the convenience of the package and the assured certainty of uniformity. Imagine rolling a barrel of apples out on a street corner and trying to sell its more or less uncertain contents.



Eventuation of Page was the grand champion Aberdeen-Angus bull at the 1930 International. He was shown by Briarcliff Farms, Pine Plains, N. Y.

Our Apple Industry

PENNSYLVANIA apple growers may regard their business with a reasonable measure of thanksgiving and a large measure of optimism. It has not been a "good year" for most of us. A few have suffered the shock of an almost complete loss of crops. A few have had good crops and have made money. A majority have had light crops and now stand a good chance of breaking even, or perhaps even doing a little better.

It might easily have been worse. In August, when the drouth had us in a strangle grip, it seemed that little could be salvaged out of the ruin. The apples hung on the trees, dull and listless. We could not see that they had grown any for a month or more. But in many cases the rains came in time to save the crop, or the trees drew on unsuspected stores of strength. Most orchards packed out more in October than had seemed possible in August. The fruit was small, but clean and high in finish.

The early fall market was depressing. Dealers were not interested in buying apples at any price. The business stagnation was reflected in the apathy of local markets. It was hard to get much over \$1 a bushel for fruit that should have sold for \$2, considering the short crop. In many cases storage seemed the only recourse. But cold storage involves additional expense and added risk; it is a gamble at best, and especially so in a season like this. Common storage is a game of chance also; the expense is not so heavy, but the chance of loss is equally as great. We were warned that this would not be a good year for keeping apples in common storage; that the drouth had injured their keeping qualities. This has proved to be the case. About November first, when the crop was under cover, the situation looked anything but hopeful.

Eastern apples have qualities that are superior to western fruit, and it is on these that eastern growers have a chance to put something over on the western growers. Eastern apples have distinctive taste and flavor. Each variety has its own characteristics in these matters. Western apples have a very similar taste and flavor, regardless of variety. No doubt the apples being sold on the streets are of several varieties, but the buyer cannot distinguish them. They are all just fine, big, red apples. But the great western apple growers' organizations have advertised and popularized Pacific Coast apples and made the city public think that they are the only desirable apples grown. And this unemployment sale is furthering their popularity. Isn't there a suggestion in all this that it is time for eastern growers to come up to date in organization and promotion work?

Truck Crops

By GILBERT S. WATTS

TO home gardeners we wish abundance that will keep the table supplied and fill all the empty jars.

To market gardeners and truckmen we wish the most bountiful yields from the best of markets.

To both, many gentle rains will make the great drouth of 1930 as a nightmare that is past.

Now for a Resolution. It is the lips of a gardener I heard speak a few days ago: "Resolved that I will lick anything 1931 may bring, by getting busy, thinking hard, planning hard, working hard, by being on the job and onto my job."

Spirit and Enthusiasm, with Information and Experience, make a four-horse team that has pulled a few gardeners through the hard times and dry weather of the past year to a satisfactory finish.

If the income of farmers continues at a relatively low average level 1931 the efficiently managed and adequate home garden will be especially worth while because of the savings cash expenditures for food that it will make possible.

No matter how bad the conditions there are always a few home gardeners who have fine gardens, some commercial growers who make a little money. And we must admit that Lady Luck never has been of much assistance around the garden.

Think; plan; plant; work.

Whatever business conditions turn out to be Pennsylvania's home and market gardens should prove a source of greater savings and income than ever before. Competition may be severe. Still it seems should be able to make capital of the markets at our very doors while others must ship or truck hundreds or thousands of miles.

Finally we hope readers of the Truck Crops column will remember that this is a service department. We are not content merely to wish you your 1931 gardens will be the best ever grown. We hope we may be able to help solve some of the problems that are liable to arise. The service is free. Simply address your queries (stamp enclosed) to Editor, Truck Crops, Pennsylvania Farmer, 7301 Penn Ave., Pittsburgh, Pa.

Friendly Talks

By Edgar L. Vincent

THE lure of the other side! Do you remember when we were boys and girls, and had the old-fashioned "writing books" in school? What a fascination there was in the page just over the leaf!

And are we not still turning the pages of life's "writing book"? Years come, the years go, and we all find us working on to the end of ourselves before the last page is reached. We blot some of the pages. Here a line where we made a wrong move.

But day by day we wish we could turn the leaves and see what is store for us just a little bit ahead. An all-wise Teacher has made it possible for us to do this. Not a single inch can we see ahead, but we can do it to make today's work just the best we can, and wait for the day when the leaf will be turned.

And that is best. As it is the corner of the new year has a mighty inspiration for us. Whatever the past may have had of loss or of gain, we are buoyed up by a great hope that the best is just ahead.

That is our hope today. Let's our best to make it come true! Good-bye, then, old year! Welcome to the new!

MORE READERS ON FARMS IN PENNSYLVANIA THAN ANY OTHER FARM PAPER

PENNSYLVANIA FARMER

Published Weekly

Established 1877

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER
Entered as Second-Class Matter at the Post Office at Pittsburgh, Pa.,
under the Act of March 3, 1879.

President - Arthur Capper
Vice-President - T. D. Harman
Vice-President - George M. Slocum
Editor-in-Chief - E. S. Bayard
Manager - Neff Laing

New York - 420 Lexington Ave.
Chicago - 203 No. Wabash Ave.
Detroit - 1632 W. Lafayette Blvd.
Philadelphia - 1201 Chestnut St.
Cleveland - 1011 Rockwell Ave.

Published every Saturday by CAPPER-HARMAN-SLOCUM, Inc., 7301 PENN AVENUE, PITTSBURGH, PENNSYLVANIA

Pittsburgh, Pa., December 27, 1930

No. 26

Will You Sell My Eggs?

By HOWARD MITMAN

"even Stephen"; if the store had to pay out money the commission or profit taken was two cents per dozen. "Them were the happy days." There is a wide gap between two cents per dozen and eight

or ten or more cents per dozen; almost as wide as that between farm conditions then and now.

These are the conditions; I have neither comment nor suggestion to make; but, and this is a very big "but" indeed, if and when the Federal Farm Board gets its cooperatives working smoothly and efficiently, there are bound to be other and perhaps greater changes in poultry and egg marketing, if we may base our conclusions on what the Pacific Coast cooperatives have been doing for some years past. It is a far cry from the carrying of a basket of eggs to a country store, to the great packing plants where tens of thousands of cases of eggs are handled for hundreds of producers.

I am not opposed to such methods where conditions make them not only advisable but a necessity; but I am wondering just what the outcome will be for us in Pennsylvania.

With this in mind I wrote in my letter to Mr. Willardson the gist of the foregoing and then asked him point blank, "What defense can we of Pennsylvania put up against such competition?" For, assuredly, we must find some way of meeting the issue or practically go out of business.

From his reply I gather that he is busy setting up regional, state and national cooperatives, and that the problem in our state will be taken up in due season.

Since the surplus in our state is not indigenous but extraneous; that is, a surplus not created by us but forced upon us, the way to handle it must be far different from that found effective and sufficient elsewhere. This is self-evident, but the job is not therefore simpler or easier of solution. In fact, it becomes more difficult because little of the experience gained in the past seems to apply.

I am writing this in the hope that many who may read it will have some constructive criticism, some workable plans to present at our annual meeting at the Farm Products Show in January, when the committee hopes to present a report and time will be given for discussion.

"In a multitude of counsellors there is safety" was never more true than now. "Many men of many minds" is not so bad a saying as it is often made to sound, for an attentive ear may often pick a modicum of sense and, at rare intervals, a pearl of great price, from even random talk; it depends mainly on the quality of the mind that guides the ear. So I trust none will hesitate to say his say, her say, at the meeting in January. Marketing is by all odds the toughest and at the same time the most important job we now have, but none.

A cooperative, such as Mr. Willardson is busy calling into action, here, there and yonder, does many things for its members besides, and preliminary to, selling. The eggs must be gathered into the packing plant, cleaned, graded, tested, candled, packed, labeled, and after these and other services have been applied comes the selling, itself no mean chore.

(Continued on page 11.)

What Are You Going to Do About It?

All one of the seven or ten men in this country who don't know what the Federal Farm Board will accomplish; and, if that is not distinction enough, I am, too, one of the three citizens of this land who have no alternative plans to offer. At the same time I am doing my best trying to understand, at least in part, where we are going from here.

Some time ago I learned that the Farm Board had appointed one Albertus Willardson to the new position of specialist in charge of the cooperative marketing of poultry and its products; and I became interested.

The Pennsylvania State Poultry Association in the year 1930 appointed a committee on labeling and the cooperative marketing of poultry and eggs; a sort of double-barrelled argument with both barrels aimed at the same target—better returns from chickens.

I thought it would do no harm to learn what Albertus had up his sleeve, so I wrote him a nice letter and got a nice letter in reply.

We know without being told how greatly the use of the chain store method of merchandising poultry has affected our egg and poultry business. As many eggs as it is commonly said, does not

produce as many eggs as its people consume; therefore Pennsylvania poultry people have no surplus of their own making and need not be pipped on the wrist. It cannot be denied, however, these November days, that there is an over-supply of eggs, a d—d (pronounced) surplus; but the driver of the surplus is the agency that pours into the markets in city, town and village, alien eggs from great open spaces, where we are very inconsiderate.

When, hat in hand (at figuratively), I go to one of the markets where those eggs are offered for sale, and offer some of my better eggs such as I have used to bake, I am greeted with the assurance that they will be glad to take my eggs—at a price; which figures out some 8c to 10c below their then selling price.

A good many years ago I packed baskets of eggs to store for mother and also for things she needed. The store man did the rest. The "trade out" required the eggs the barter was



Our growing poultry industry demands attention.

PENNSYLVANIA FARMER

Consolidated with
PENNSYLVANIA STOCKMAN and FARMER

Published every Saturday by
CAPPER-HARMAN-SLOCUM, Inc.
7301 PENN AVENUE, PITTSBURGH, PA.

ARTHUR CAPPER, President
T. D. HARMAN, Vice-President
GEORGE M. SLOCUM, Vice-President
NEFF LAING, Manager

EDITORIAL STAFF
E. W. BAYARD, Editor-in-Chief
C. L. WHITE, Editor
MILES HORST, Field Editor
M. C. GILPIN, Editor
G. W. HARRIS, Field Editor

Editorial Offices: PITTSBURGH, HARRISBURG, PHILADELPHIA
Contributing Editors: R. P. Kester, Alva Agee, L. W. Lighty, W. D. Zinn,
H. U. Blodgett, J. F. Shibley, F. L. Bentley, J. G. Lipman,
S. W. Fletcher, H. C. Knudsen, A. A. B. Ward,
R. L. Schaefer-Hansen, Gilbert S. Watts,
Mrs. Gertrude S. Stewart

TERMS OF SUBSCRIPTION: FIFTY CENTS PER YEAR
Canadian subscriptions Fifty Cents per year extra for postage.

RATES OF ADVERTISING:
\$1.00 per square inch measurement, or \$14.00 per inch each inser-
tion. Minimum space 3 lines. Special rates on application for
livestock and classified advertising. No deceptive, immoral or
swindling advertisement inserted at any price.
Member Agricultural Publishers' Association.
Audit Bureau of Circulations.

Volume 148, No. 26 Established 1877

AN UNGRATEFUL BULL

MRS. JOHN C. McFADDEN, living near New Athens, Ohio, recently took a bucket of feed into the stall to feed a Jersey bull. The animal, which she erroneously thought was tied, turned on her, goring her so severely that over forty stitches were required to close the wound. Her son, who was near, effected a rescue and undoubtedly saved her life. Assurance doubly sure is the rule to follow around bulls, gentle or otherwise.

THE CHRISTMAS TREE CROP

MOST of the 2,000,000 Christmas trees used in Pennsylvania this year came from New England, the Lake states or Canada. More than ever before, however, were cut from plantations in this state. The sales of planted trees from one estate in eastern Pennsylvania now amount to several thousand dollars annually. As a means of getting something from unused land the Christmas tree crop has much to recommend it, while the value of the product to the consumer is beyond dispute.

FIRE WOOD FROM STATE FORESTS

A PLAN to aid unemployed in securing fuel is announced by the Pennsylvania Department of Forests and Waters, which says that firewood in state forests is available for home use. Special areas have been set aside where cutting may be done according to methods designated by district foresters. Welfare and civic organizations may take advantage of this opportunity by getting in touch with the forest official. While conservation of forests is generally admitted to be desirable here is an example where it offers unexpected aid in a state. If charitable organizations will communicate with their nearest district forester they will be informed how to make use of this aid.

HISTORIC RAILROAD

THE first stretch of railroad in this country to carry a steam locomotive is between Honesdale and Carbondale, in north-eastern Pennsylvania. It was launched by the D. & H. Railroad Company in 1827 as an epochal project in the nation's transportation history. On August 8, 1829, the "Stourbridge Lion" chugged its slow but historic way over this road. Now the owners ask permission to abandon the line, since its 23 crooked miles cannot compete with the 16 miles of concrete highway which now connect the two towns. Great changes have taken place in transportation, especially in recent years. What the next century will bring forth even imagination hesitates to forecast.

PENNSYLVANIA FARMER

APPLES GO EAST

WHILE western boxed apples are selling to an unusual extent on the streets of eastern cities an unexpected outlet for the Pennsylvania crop has developed abroad. More than a thousand carloads have been shipped for this purpose. That is about 60 per cent of the shipped crop and the greatest proportion ever exported. Apples of high quality have brought more in certain foreign markets than at home. The picture of Pacific Coast fruit selling in this state while our apples go to Europe may illustrate some glaring defect in our distribution system, or it may mean that apples like to travel. At any rate growers in both sections are probably grateful for the demand without questioning the cause.

A MARKET LAMB PROJECT

PENNSYLVANIA sheepmen are showing considerable interest in cooperative marketing of lambs, according to W. B. Connell, sheep and wool specialist. At several sheep growers' meetings this winter the subject will be discussed. One advantage that such a move has is its influence on the higher quality of lambs produced, for the closer consumers come in contact with the market the more they come to realize the importance of better breeding and feeding and the value of docking and castrating. These things make the lambs worth more, and regardless of any market advantage of group selling are profitable to the producer.

AN OLD FARM PROBLEM

THE idea that the "farm problem" is something new or peculiar to modern times occasionally gets a jolt when we are permitted a glimpse into the forgotten past. Recently on the site of an ancient city a clay cuneiform tablet was unearthed which recorded the fact that 3,500 years ago one Aril-induppi, a Mesopotamian farmer, was forced to pledge his entire farm as security for the loan of three and a half pounds of lead. Whether lead was high in price or farm credit low this farmer was undoubtedly facing a problem, as farmers have faced, and solved, since man first tilled the soil or tamed wild beasts for his own use. The farm problem is part of the struggle of the race, first for existence, then for comfort and now for the multitude of things which go to make up our complex civilization.

TAX ON BILLBOARDS

A LAW imposing a tax of 3 cents a square foot on outdoor advertising and requiring those engaged in it to pay an annual license fee of \$100 will go into effect in New Jersey on January 1st. In two counties alone this has already had the effect of removing nearly 4,000 obsolete and illegal signs, it is said. In addition many billboards have been eliminated and others relocated. Those who value the scenic beauty of the country will naturally approve this law, and those whose signs offend rather than please the public should realize that their business would be better off without them. Signs which have outlived their usefulness have no excuse for existence, but many still linger to discredit all outdoor advertising. New Jersey's step toward cleaning up the landscape is a good example for other states to consider.

WOULD INVESTIGATE FARM BOARD

COTTON shippers have requested Congress to investigate the Federal Farm Board. Representatives of the shippers' organization, at a hearing before a subcommittee of the Appropriations Committee, pointed out that since the Board began operation the cotton market has declined from 18c to 10c a pound. They say that while the drop is partially attributable, of course, to world

conditions, we believe that the entry of the government into the field of business with seemingly inexhaustible capital has so undermined confidence that the merchant, the manufacturer and finally the consumer have been driven from the normal course of business. Consequently grain, livestock and other commodities have suffered loss of buying power. Under these circumstances the cotton people believe that the Appropriations Committee should look into the effects of the Board on markets before giving it any more money. While the request is not likely to be granted, it points to the growing belief that government in business is a disruptive factor, pretty certain eventually to aggravate a condition it is supposed to remedy.

MORE REGULATION

THE Grain Futures Administration, in its annual report, believes that it should have authority to impose "a rational limitation" on the amount of grain any trader should be permitted to buy or sell "for speculative purposes." We are old-fashioned enough to believe that a free and open market is the best thing for all concerned, including producers, and that conferring greater authority on those who want to "regulate" our markets is more likely to do harm than to do good. The best regulator of any trader who goes too far in speculation is the action of other traders, not the authority of somebody who has power to say how much shall be bought or sold. Is it not a fact that producers fare best when trading is active? If so why endow some official with authority to interfere with such activity? The bill conferring such authority is likely to be enacted, but will probably have an effect just the opposite to what is expected by its proponents. Business can be "regulated" too much.

YET TO COME

SOME ten or twelve years ago Col. Leonard P. Ayres, Cleveland banker and business analyst, by the use of charts and curves representing earlier business conditions indicated that we should expect irregularly declining prices for a decade or more. Now, judging by the same signs, he believes we have reached the bottom of a cycle and the "next development will be recovery. The records of the depressions of the last half-century combine to support the hope and even the qualified opinion that the evidence of its beginning will be apparent in the spring of 1931." The Colonel's correctness in his former opinion gives weight to his present one. He doesn't look for a boom but expects the coming year to "be characterized by progressive improvements instead of by recurrent declines." This rather mild optimism seems conservative to most folks, who as a matter of course look for the future to be better than the past, and on the average they have not been far wrong.

When considering our losses or disappointments we sometimes fail to realize that every year is better than its predecessors. In dealing with the problems of today we easily forget the hardships of yesterday. The history of this country is a record of gain in human welfare from its bleak beginning on the barren New England coast to the luxury-laden present. The "good old days" are fine to cogitate over, but we may be glad we don't have to go through them again. Any one who doubts this may trade his car for a yoke of oxen, junk his farm equipment and work out his salvation with scythe and hoe. The future as the past will have its ups and downs, its good years and those not so good, but the sum total will be in the direction which gives us reason to face each coming year with a new hope and the old undaunted courage. We trust that every reader will find 1931 both friendly and capable of fulfilling his most cherished desires.

December 27, 1930.

December 27, 1930.

FORTY years of library extension work in New Jersey show some interesting results, according to the report of the New Jersey Public Library Commission. 16,841,976 volumes were circulated by public libraries in the state in 1930 compared with 981,875 in 1900. Appropriations for library service amounted to \$985,000 in 1930 as against \$281,487 in 1900. Seven county libraries have been established during the past ten years and another decade of such progress will result in complete library service for the state.

Appreciation of library service as a factor in "city life," says the Director, Sarah B. Askew, is so grown that it is impossible to keep up the demand for aid in the establishment of libraries and, at the same time, extend the proper assistance to those libraries already established, to supply books to those districts without library service.

The executive committee of the New Jersey State Poultry Association recently endorsed "Emergency Eat More Eggs Campaign" of the National Poultry Council and the International Chick Association. A committee in charge of the campaign has been appointed with headquarters at Dayton, Ohio. This committee is engaged in raising \$100,000 from various poultry organizations and allied interests to be expended in promoting an increased use of eggs as a food. Newspaper advertising, radio broadcasting and other mediums for circulating information on the value of eggs as a food will be utilized. When is one of the best advertisers the world, but since her cackle does not reach the consumer it is reasonable that her owner should be telling mankind of her attainments.

The adoption of United States standard grades by a number of commercial apple growers in New Jersey during the last season has increased the demand for their apples by widening the market area, bringing more buyers, and making possible to ship large quantities to foreign markets, reports Prof. A. J. Koenig, extension service horticulturist at the New Jersey Agricultural Experiment Station. Buyers and brokers have been coming with each other during the season for uniformly graded fruit to meet the requirements of foreign markets. More than 200,000 bushels of apples were graded, packed and sold during the year under these grade requirements.

This may not seem like a very big percentage of the total crop, but Professor Koenig points out, "but it is sufficient to establish the fact that the use of United States standard grades is practical and profitable in New Jersey." Chain store buyers and other large purchasers agree to buy on uniformity among the packages and, therefore, prefer fruit graded in accordance with standard specifications. It is for this reason that every grower should be familiar with the requirements of the various United States grades and use them as far as possible in marketing his crop.

A recent meeting of the poultry breeders and hatcherymen who have their flocks and hatcheries under the supervision of the State Board of Agriculture, an association was formed and the Official Poultry Breeders and Hatchers of New Jersey was organized.

The object of the Association is to unify the poultry improvement efforts of the members and the State Board of Agriculture so as to constantly improve the quality of the hatching eggs, baby chicks, pullets and cockerels supplied to the poultry buying public.

Officers were elected as follows: President, By-ron Pepper of Georgetown; vice-president, D. Herman Hettlinger of Elsmere-Wilmington, and secretary-treasurer, Warren C. Newton of Bridgeville.

The price of milk to the consuming public in the Philadelphia milk shed was reduced one cent on both quart and pint bottles of all grades beginning December 15. This was agreed upon at a recent conference between the sales committee of the Inter-State Milk Producers' Association and the milk distributors. The producers' price was lowered 40 cents a hundred on basic milk; this

PENNSYLVANIA FARMER

(581) 7

New Jersey Farm Comment

By G. W. HARRIS

represents more than three-quarters of a cent a quart reduction.

The necessity for this reduction in price to consumer and price paid the producer has been brought about by a steady increase in production of milk since October 1 and by the fact that since that time the consumption of milk in Philadelphia and nearby cities has been reduced approximately ten per cent on account of the unemployment situation. Early in December President Allebach issued a warning to all members of the Inter-State Milk Producers' Association, telling them of the situation and asking producers to decrease production at least ten per cent before December 12.

"Apparently the farmers did not heed this letter at all," said President Allebach in giving the unwelcome news of the price cut.

"A check-up on the production of milk on the 11th of December showed that they actually had increased their production, on an average of at least four per cent in practically every section of

Delaware, in the latter part of July, followed by the Parish Show of the Eastern Shore Jersey Cattle Club in August, and the Trenton, New Jersey, Pottsville, Reading, Allentown, Bloomsburg and York Fairs in Pennsylvania.

In the open classes, the herd won forty-three blue or first ribbons, thirty-two second places, thirty-one third, twenty-three fourths, seven fifths, and two sixth place prizes. In the group classes, including exhibitor's herd, get of sire, produce of dam, etc., these Jerseys brought in the coveted blue ribbon twenty-seven times and won the second and third ribbons eleven and seven times respectively.

At all shows this herd won the first in get of sire, and produce of dam classes; and had the first exhibitor's herd at all except the Kent-Sussex Fair. In individual championship places, the Coweview entries had the junior champion male at seven shows, the junior champion female at four, the senior champion female at five, and the grand champion male at six fairs. Mr. Willis' future herd sire, Raleigh's Warder Noble Jack, No. 308,631, carried off the individual winners' honors by being picked junior champion male at every show except Allentown and Trenton.

No junior champion was in the catalogue classification at the former place, and at Trenton this young bull was considered the second best in this event; only after deliberate consideration by the judge.

That Mr. Willis' herd is not only high in exhibition, but also in production is shown by the fact that this bunch of 75 cows averaged over 360 pounds of butterfat each during 1929 and led the cow-testing association this year with the highest monthly averages of butterfat per cow in April, May, June, July, second highest in August, third in September, and ninth in October. When it is remembered that this herd has around 75 milking cows in it, these averages should assume more significance than if the herd comprised only 15 or 20 cows. During this same period the average milk production per cow in the Coweview herd has been among the first ten every month, but two, and the average test has never been below 5.2 per cent butterfat.

Since the foundation of this herd by Mr. Willis several years ago, he has always been on the lookout for better show and production type animals for his herd. To find the best producers, Mr. Correll has been running official tests on various cows in the herd since assuming the management about three years ago. Under his direction seven state championship records for different classes have been made. E. W.

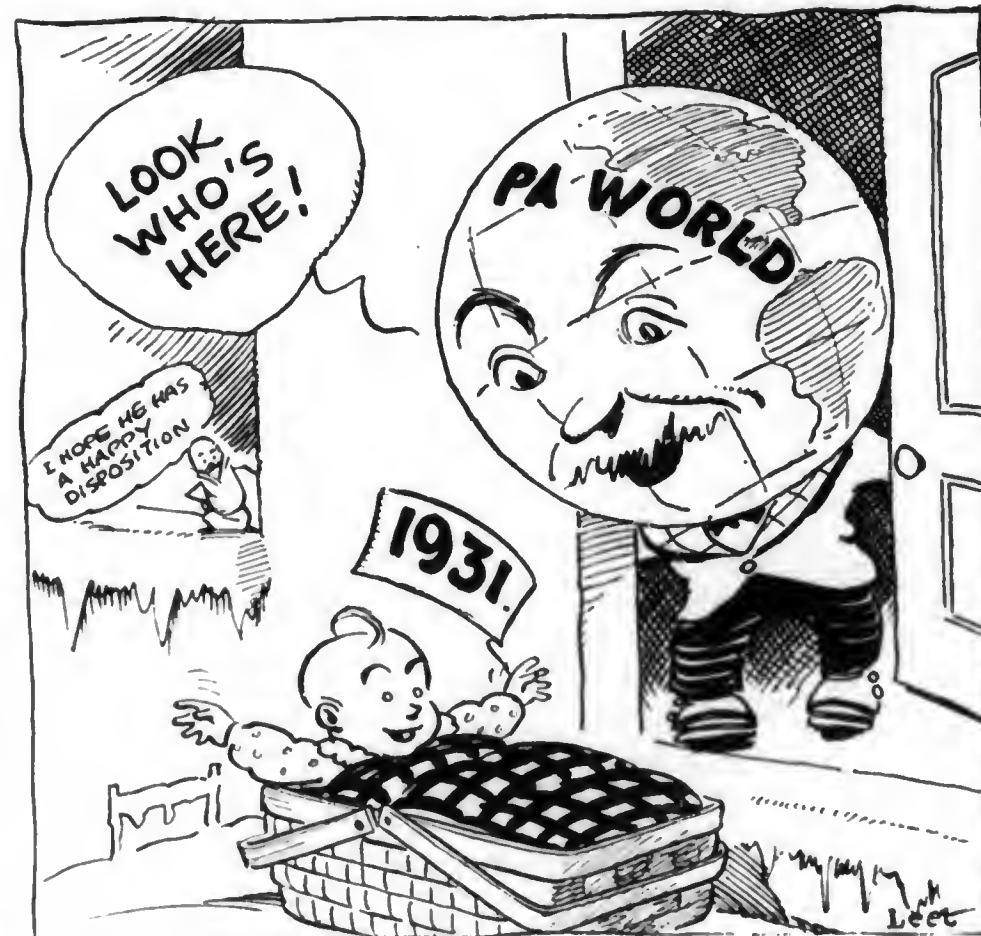
DATES for the annual winter meeting of the Maryland Horticultural Society have been announced by A. F. Vierheller, secretary. The sessions will be held at the Lord Baltimore Hotel in Baltimore on January 6 and 7. These meetings are a part of the annual gathering of the Maryland Agricultural Society-Maryland Farm Bureau Federation.

The program this year, according to Mr. Vierheller will give special consideration to some of the problems which have arisen during the past season because of the severe drouth. Cultural practices next year, he states, will undoubtedly need to be modified somewhat from those ordinarily followed.

THROUGH the cooperation of the Burlington County Extension Service and the teachers in the Masonville and Pemberton township schools, three Four-H Clubs have been successfully organized.

The Masonville students are devoting a definite period to nature study. The work has been divided into three departments, one of which will devote their periods to a study of birds, another to trees and the third to animals.

Mrs. Marian Harris of Burlington has been responsible for the establishing of Four-H Forestry Clubs in the Pemberton township school to better facilitate the conducting of the nature course studies.



Happy New Year!

John Imberlay, Trustee

By Homer Green

Copyright, 1933, by Perry Mason Company, Boston, Mass.

ROBERT grew a shade paler, and John Imberlay shut his lips more tightly together. McClelland continued: "I presume you will waive a hearing, Robert. I should advise you to do so. It will do you no good to have all this evidence presented before the justice."

"I don't know just what it means to waive a hearing," replied the boy, "but whatever the law is, I'll abide by it."

Then John Imberlay said, "McClelland, you're the bank's attorney, and the bank is prosecuting this case. It strikes me that the prisoner ought not to be compelled to depend on you for advice as to his conduct. I can't properly go bail for him, but I can provide him with a lawyer. It shall never be said that this bank railroaded any man to jail." He pushed a button.

"William," he said to the clerk who responded to his call, "go to Sidney Bronson's house, and ask him to come to the bank."

When the lawyer came he was allowed to talk with Robert in private.

On their return to the board-room, Bronson said, "The young man declares he is innocent, and I myself feel that some dreadful mistake has been made, and that in the course of a few days the whole matter will be cleared up. Taking that view of the case, I have advised him that it is neither necessary nor desirable to have any evidence presented to the justice tonight. He will waive a hearing, but he will be unable to procure bail before tomorrow. Will any of you gentlemen accompany us to the justice's office?"

"I will go," said the president.

Bronson opened the door and called the constable.

Robert rose and stood leaning on his cane. The constable, still smarting under the lie that had been given him by the prisoner, took a pair of handcuffs from his pocket, and was about to adjust them on Robert's wrists.

The next instant they flew rattling to the floor. John Imberlay had struck them from the constable's hands. "You coward!" he exclaimed, his eyes blazing with indignation. "Don't you dare to commit such an outrage as that! Can't you get a lame, harmless, willing boy to the justice's office without putting him in irons?"

The constable shrank back, abashed.

"I'm responsible for him," he said, weakly.

"I'll be responsible for him," replied the president. "Come along."

Squire Jenkins had been awaiting the return of the warrant and the production of the prisoner for the last hour, his impatience increasing with every passing moment. He was, therefore, not in the best of humor when the party finally appeared. Learning that a hearing was to be waived, he drew the commitment papers, and completed them just as the sheriff entered. John Imberlay had sent for the sheriff. He had no mind to entrust Robert further to the tender mercies of Constable John Potts.

"Here's your commitment, sheriff," announced the justice, "and there's your prisoner. This court is now adjourned." Whereupon he proceeded, without more ado, to turn out the gaslights that illumined his dingy office.

ROBERT had had some slight acquaintance with Sheriff Shepherd in former years. He remembered that his father had known him very well. Once Robert had come with his father to Briery, and they had called at the court-house for a friendly visit with the official, and had been taken to look at the jail.

Robert recalled now, with a shudder, how dark and bare the little stone-walled cells were, with their iron-grated doors and narrow slits of windows, their cold cement floors and small cots. Yet the cells themselves were not nearly so repellent as the evil-looking men who occupied them.

There was a whispered consultation between Mr. Imberlay and the sheriff, and then Robert said good night to those who had accompanied him to the justice's office, and started with the officer toward the jail. He felt tired and faint, and it was with some difficulty that he kept his course on the pavement. They were quite alone, the sheriff keeping up a cheerful run of conversation as they went, and obtaining, in a general way, an idea of the trouble in which the boy found himself.

At the turn of a corner the forbidding stone prison confronted them. But as they passed by the entrance doors and turned down a cross street, Robert thought they were to enter more privately, by some side passage and for even this small concession he was grateful.

Then the sheriff said, "You'll have to come with

me to my house. I always keep the key there, and the warden's asleep by this time."

His house was but a few doors distant, and they soon reached it. Lights were still burning there, and in the sitting-room, at her sewing, sat a motherly-looking woman, who rose and came forward as the officer entered with his prisoner. It was the sheriff's wife.

"Mother," he said to her, "you remember George Leighton, don't you?"

"Yes," she replied, "I remember him very well. He was a very good man."

"Well, this is his son Robert. He's a clerk in the Citizens' Bank. He's going to stay overnight. Is the spare room ready upstairs?"

Robert gasped with astonishment. Was this officer of the law going to do for him, a friendless prisoner, such a beautiful thing as to keep him in his own house overnight, instead of in a cell at the jail?

"Mr. Shepherd," he said, "what—why—? But he could get no further.

"Oh, now that's all right, my boy!" said the kind-hearted sheriff. "There wasn't a better man in Broad Valley than your father, and you've got as good a mother as any boy, except me, ever had; and John Imberlay says you're no rascal; and I'm not ready to believe you've been guilty of anything wrong, and if I was, I wouldn't let a boy like you stay overnight in company with the worst criminals in Wyanda county. So that settles it."

The revulsion of feeling was too great for Robert's already overwrought nerves, and without a word he turned and sat down on the steps of the hall stairway and burst into tears; and the sheriff's good wife sat down by his side and soothed and comforted him.

On the morning after Robert's arrest John Imberlay came down early to breakfast. He was anxious to get again to the bank, that he might once more go over the books and accounts, in the

The Cheerful Plowman



DENTAL TROUBLES

I HAD a tooth pain years ago, but like a dunce I let it go. 'Twas harvest time, I'd have you know! The pain was bad as it could be. Said I, "Some day I'll have to see just what the heck is wrong with me." The pain let up one happy day, so I kept on at forking hay, at stowing fattened corn away. "That pain may not come back again," I told the hired girl and the men, "I'm chipper as a clucking hen."

It did come back another year with pang more deep, and stern, and drear, it came when hoeing time was near. "When that fool pain lets up, I swear, I'll find some wicked dentist's chair and see what he can find in there!" That's what I said, but did I go? Not on your life, for don't you know I had to wield the garden hoe. The pain let up as pains will do and though I'd lost a pound or two I made no move when it was through.

It came again another day and night and noon it seemed to stay. I could not drive the thing away. I tried to fight it out once more, but gosh, my jaw was beastly sore, both day and night. I paced the floor. "There's work to do that must be done," said I, but swiftly one by one those pangs across my map would run. At last, at last, I say, I went to Dentist Phil McKay. He took one look, then rose to say:

"You poor, old, silly mess of plums! That awful tooth, those swollen gums! Neglect your mouth and see what comes! I'll have to sit astride you here and drill out half that tooth. I fear, then clip my saw and cut some windows in your jaw and other stunts within the law. I'll have to hammer in some wax and thirteen pounds of carpet tacks; come nurse, and bring a pair of jacks."

"What will it cost? A darned sight more than you have really bargained for! Come open up! I know it's sore. But had you come six years ago I would not then have scared you so: the cost is your own fault, you know." J. E. T.

hope of discovering something to clear the boy of the charge against him.

Mr. Imberlay could not bring himself to the belief that Robert was really guilty. And suppose he were actually guilty! Suppose the temptation had been too strong for him to overcome, and had really taken the funds of the bank and had fished its accounts, how much greater crime had committed than had John Imberlay himself, for twenty-two years had withheld from its rightful owner a fund much greater than that which Robert was charged with having stolen from the bank? John Imberlay's fault was still his secret, and Robert Leighton's fault had been covered; that, so far as he could see, was the real difference between them. That conclusion had reached after hours of sleepless parley with his own conscience; after brushing away, by one, the flimsy excuses he made to himself his conduct.

John Imberlay sat at his breakfast-table weary-eyed and perplexed in mind.

Margaret, too, came into the dining-room went about the house after breakfast with an anxious face. She had learned of the events of the preceding day, and was not only troubled, but sorrowful. For these Broad Valley people, the Leightons and the Orchards, with their joys and sorrows, had taken deep root in this young life, and the tragedy that now enveloped them had also in its depressing shadow. She wondered what June had thought when she learned about—June, the light-hearted and undaunted.

She had not long to wonder. The next morning June herself, hardly waiting for an answer to ring, swept into the hall, and found herself Margaret's arms.

"I've come to town to help about Robert," announced. "Of course you know what's happened. I drove in with Mrs. Leighton. She's gone to jail. I had to go somewhere, so I came here."

"I'm so glad you've come!" replied Margaret. "Isn't it dreadful?"

"Of course it's dreadful—what there is of it. But Bob's innocent, you know. Just as innocent—as—as daddy. And daddy's the most innocent being on the face of the earth."

June was hopeful and practical; and she soon

renewed Margaret's drooping spirits, and together they went to meet Mrs. Leighton, full of plans for immediate action.

WHEN John Imberlay reached his bank the morning, he found the cashier and the examiner already there, although it was not yet an hour of the time for opening the doors of the bank.

"There is no material change in the situation since last night," said the cashier, wearily, at the morning greetings had been given. "The plan of operation is well disclosed, and was the same in each instance. The amount, as written on the deposit slip, was changed to a smaller amount, making the corresponding entry in the cash-book. The slips were made out and signed by the depositors themselves; the cash-book entries were made by Leighton. There is no escaping the conclusion, so far as I can see, that he is the one who abstracted the money in the right amounts, made the books and the cash balance."

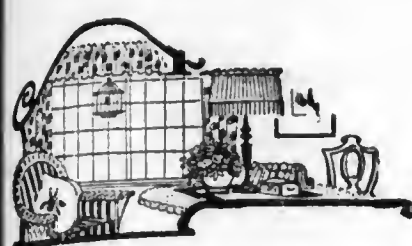
"It was a foolish method of stealing the bank money," said the examiner. "He was sure to find out, sooner or later. The first depositor found his actual balance to be less than that shown by the figures in the bankbook would demand explanation, and that of itself would lead to investigation. Why, the very writing up of a bank book, left here to be balanced, would disclose the sort of meddling with the account."

"Very true," replied Mr. Ridgebury, "but person who did it was very shrewd in the matter of selecting accounts for alteration. He appeared to have chosen those of persons who seldom look in their books to be balanced, and who, when they do, rely wholly on the figures given them at the bank. Oh, it was very skillfully done. The surprising thing about it all is the fact that, during his stay here of less than a year, he should become so thoroughly familiar with the habits of the bank's customers. He frequently took the art's place in the teller's cage, however, and course that gave him the opportunity to abstract the money."

The directors were dropping in now, one by one, to talk over the embezzlement, and to be ready for the meeting of the board at nine o'clock. The clerks also were taking their places at their desks and opening their books.

Just before the hour for the board meeting Mr. Leighton, accompanied by Margaret and John, came to the bank. She wished, she said, to see Mr. Imberlay.

(To be continued.)



The Farm Home



Sally Morrow's Florida Dream

By Elsie K. Watson



Winter had descended with a vengeance on East Forest, Pennsylvania. Wind whistled and moaned through the tall pine trees surrounding the Morrow house, and sent puffs of smoke down the chimney. Great white snowflakes were fast covering the paths to the barn and woodhouse

while icy hands seemed to knock at the windows when the cold North wind tore the icicles loose. The big, open fireplace in the "room" seemed to set the logs with greedy tongue. Sally Ann hoped the supply would last all evening for it was quite a little distance to the woodshed and Jim couldn't be coaxed out after dark.

Since the children had married and left, part of the big, rambling old house was closed each winter. Sally Ann and Jim found it much more comfortable to live in three rooms in the south end—kitchen, sitting-room and bedroom above the kitchen where the heat from the big coal range took a little of the chill from the fireless room and a brick, religiously heated every night and placed in the feather bed, did the rest.

The sitting-room was cosy and inviting this cold night. The old red rug Jim had bought at the Cross Roads store fifteen years ago was still bravely doing its duty, as the furniture man had assured him. Frequent sweeping had dulled its crimson brightness and even the hated yellow roses were turning a rusty brown and no longer offended Sally Ann's artistic sense. Jim's big arm chair and Sally Ann's small rocker, with its crocheted tidy, stood at either side of the golden oak table.

It didn't make much difference these days that Sally Ann's side of the table was out of the reach of the lamp's rays. Time was when the children were small that her hands were never still—mending stockings, torn overalls or sewing on buttons. But the last few years rheumatism had Sally Ann's poor hands in its unrelenting clasp and they were often idly lying in their owner's lap or somewhat nervously twisting a corner of the starched, gingham apron.

ALL the diplomats aren't in Washington; most of them may be found in the kitchen. After forty years with Jim, Sally Ann could have given any of them pointers. Tonight, although her hands were idle, her brown eyes were shining with excitement and her cheeks pink with anxiety. For Sally Ann was conspiring against her husband!

It all started when Pennsylvania Farmer began to tell its readers about the wonders of traveling and tempt them with stories of Florida and Cuba. Thursday, the day the paper arrived, was eagerly welcomed and household tasks waited while Sally Ann read of roses and sunshine.

"If I could just once," she often said to herself, "get away from East Forest for a little while in the winter. I think I could stand all the rest of the cold winters here. Seems as though I'd want to live forty more years just to remember that."

When folks are in their sixties, winters seem terrible long and cold. Think of getting on a train when it was below zero, snowing and blowing, and maybe next day see the roses blooming. My! my! 'twould almost be Heaven," with a pitiful little sigh, fearful lest she had been sacrilegious, if only in her thoughts.

And there was no reason why Jim and Sally Ann couldn't take this trip. Other farmers and their wives had gone and come back, eager to tell the wonders and ease of traveling and sight-seeing under the care of tour managers of Pennsylvania Farmer.

Hadn't Sam and Molly Byers from the very best farm gone to Florida last year? There had been an interested audience at Grange meeting when Sam and Molly held forth for almost two hours on the splendors of the South and the never-to-be-forgotten thrill of traveling like kings and queens by chartered Pullmans and special train. There was no worry of tickets nor concern in changing trains; with buses or private cars wait-

ing at stations to take the enthusiastic travelers on sight-seeing trips over fine roads and long bridges.

Mere words could not describe the boat trip to Cuba, moonlight, music and quiet waters with the little fishing vessels slipping out of the shadows into the path of the moon and disappearing again with scarcely a ripple; of the less romantic but much more important subject of abundant food and comfortable beds where the passengers were lulled to sleep by sea breezes and the gentle sway of the vessel swiftly and steadily plowing through the dark waters to a foreign shore.

But it was only last week the awful conspiracy had started—and at Ladies' Aid, too, of all places! Sally Ann and Molly had been assigned the task of sewing and winding carpet rags and since that didn't take much thinking, their tongues hadn't been still for a minute. Sally Ann was doing most of the listening, with Molly making good her boast of non-stop descriptions of Florida.

Suddenly she turned to Sally Ann. "Why can't you and Jim go this year? We'll look after the stock and the house while you're gone. You'll Jim have worked hard enough to take a real vacation and you'd better spend a little money now before you get too old to enjoy it."

The carpet rags dropped from Sally Ann's fingers, her brown eyes grew large with excitement, then clouded as she again picked up her work. "I wish we could; oh, I do wish we could, but you know Jim'd never consent."

"It's no use, Molly, he'd never spend the money. He allows farmers don't have any business gallivanting around the country, neglecting their farms."

They seved on in silence. A remnant from the minister's wife's rag bag joined a scrap of the Aid president's blue wedding dress in the endless chain of the future rag carpet and then Molly asked:

"Does Jim read the stories in the Farmer?"

The corners of Sally Ann's mouth twitched. "Well, every time I get a chance, I open the paper to the Florida pages and leave 'em where I know Jim'll be sure to see them."

"Wouldn't Jim go if he knew your heart was set on it?"

"No," Sally Ann replied, "he'd more likely want to go if I opposed it. Jim can't be hurried in any decision. You've got to let him think it up himself."

"That's an idea," Molly was all excitement. "How would it work if Sam and I come over some night and told Jim about our trip? Sam can tell about the strawberry sections and the fine farms we saw and maybe we can get Jim enthusiastic about going."

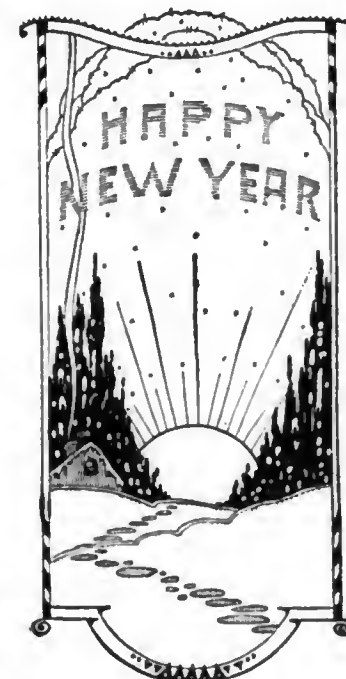
Sally Ann was a little skeptical about taking Sam into the secret but as Molly said, there wasn't anything Sam'd rather do than talk about the trip. Just give him half a chance and he'd keep on till doomsday—and maybe after that.

"I don't doubt he'll feel right sorry that St. Peter never had a chance to go to Florida," she chuckled.

"When could you come, Molly?" "Let's see. Today is Tuesday. Suppose we say Friday night and that'll give him a chance to read this week's paper. We'll get there just as soon as supper's over and the chores done."

And Friday evening was here! With startling clearness the old grandfather clock sounded out each stroke of seven. Sally Ann peered anxiously at its hands as though she couldn't believe her ears. Folks in East Forest usually dropped in long before seven and left at nine.

Perhaps the snow was getting too deep, or maybe one of the children was sick. Dear! dear! what if all their carefully laid plans were to be spoiled. Perhaps Sam hadn't approved of the idea of putting something over on Jim. Men were funny that



way—they'd always stand up for each other. Jim was comfortably stretched in his big, easy-chair, paper at hand, a dish of rosy apples on the table. He was at peace with the world—the stock fed and watered, enough to last several days if the storm should continue. Reaching the last page of his paper, Jim yawned, straightened up to glance at the clock, then slowly reached for his shoe laces.

Sally Ann expostulated. "Pa, don't take off your shoes yet. Molly and Jim will surely be here any minute now. Wait 'till a quarter after anyway."

With none too good grace, Jim retied the shoe.

Pete's sudden muffled bark from his bunk in the wash-house sent Sally Ann rushing to the kitchen door to welcome her guests.

During the excitement of greeting and placing chairs, the farm paper had slipped unnoticed to the floor and now it lay, as though Fate were helping in the conspiracy, with its pages opened to scenes of Florida, at Sam's very feet.

"Land o' Goshen," exclaimed Sam, "there's a familiar looking place," stooping to pick up the paper. "Look, Molly, there's where those business men met us in Plant City with cars and took us all around the town and out through the strawberry section. Why, right here..." and Sam was off for a good fifteen minutes' reminiscing of farm land in the Sunny South, of citrus packing plants, the future of Florida and the value of land there.

Sally Ann winked at Molly and then she was listening in open-eyed wonder. Now and then Jim would break in with a question and the anxious women could see that he was interested, although how far it went they could not tell. His questions were intelligent and they knew that at least one part of Sally Ann's conspiracy had worked—Jim had read the stories.

MOLLY had thoughtfully brought along some railroad menus and other souvenirs of the trip, including the Tour Edition, a little sheet printed right on the train, with its personal items and plans for the day and soon the two women were deep in conversation.

Assuring herself that the men folks were too deeply engrossed in their talk to hear her question, Sally Ann ventured: "But, Molly, if you're on the train most of the time, how did you get a bath?"

"Oh, they had hotel rooms reserved for us in all the cities, without extra charge, and you could get all the baths you wanted."

"Were most of the women dressed in fine clothes?"

ON Page 13 of this issue are pictures of some of the scenes about which Sally Ann dreams and Sam and Molly talk when they plan the Morrow's vacation to Florida and Cuba, February 3rd to 14th, 1931. Fill in the coupon below and receive a 16-page booklet giving details and cost of Pennsylvania Farmer second tour to Florida and Cuba.

C. L. White, Tour Manager, Pennsylvania Farmer, 7301 Penn Avenue, Pittsburgh, Pa.

Please send me without cost or obligation the booklet mentioned above.

Name

Town R.F.D.

County State Also send booklet to following:

Name

Address

"No, no, they were plain wash dresses. It looked as though most of them wanted to be comfortable instead of being stylish. My sweater and light summer coat came in handy for the evenings were cool."

"Molly, tell me something about the places where you sleep on the train. They call them berths, don't they?"

"Yes," began Molly, eager to all her superior knowledge of traveling. "Sam and I had a whole section—two big seats facing each other. We'd never been on a train at night before and that was one thing that made us late in deciding to go. But the Tour Manager told us in a letter that there would be lots of others having their first trip and we would soon feel like old travelers. Well, we were sort of shaky about it but thought we could bluff it out if the rest did. Long about eight-thirty the colored fellow porters, they call them what was our porter's name, Sam?"

"Heywood," Sam supplied. He and Jim had now stopped their conversation and were listening.

Sally Learns About Traveling

"Yes, Heywood. Well, as I was saying, about dark he came in the train and started to pull down shelves from the wall, put the two seats together, take the cushions from the backs and in two shakes of a cat's tail there were two beds—one above the other. He put a fine, soft mattress on each one and whisked clean sheets on, then several blankets and pillow-slips as white as snow. The covers were turned down so you could crawl right in. Why nobody could possibly know it was your first night on a train, because it was as plain as the nose on your face just what you were to do."

"I slept in the lower berth and Sam took the upper. We were just wondering how he was going to get up there he isn't as spry as he used to be and then Heywood came along with a ladder and Sam said it was just as easy as anything crawling in that upper berth."

"But, Molly," gasped Sally Ann. "Weren't there curtains or doors or something in front?"

"Oh, sure," laughed Molly. "There were separate curtains for the upper and the lower berths. You fastened them together after you got in and it was most as private as your own room. There was a little hammock fastened at the side and a shelf above your feet. Each berth had an electric light and there was a button you pushed if you wanted to call the porter."

"Land sakes!" Sally Ann exclaimed. "Colored fellows to do all the work and two clean sheets a day on the bed. You must have felt like a millionaire."

A Banquet Every Meal

"Each car had two washrooms," continued Molly. "One for men at one end of the car and one for women at the other end. There were three or four washbasins, a dental lavatory, all the hot and cold water you could use, liquid soap, ice water and paper cups, and an endless supply of nice white linen towels that was the envy of every woman on the train."

As Molly stopped for breath, Sam took up the story. "Next morning about sun-up, most folks rolled out so's they wouldn't miss anything. After we got our 'train-legs' it was no trick at all to shave and all the time we were begrudging the time till we could get back and see the sights."

"And then it was breakfast time," Molly began. "We think we get a feast at the Grange banquets, but you don't see those meals on the diner. Well, we had a regular banquet three times a day. Most folks complained that the food was too good."

"The first couple of hours after we got on the train we kept pretty close to our seats but after a little we got

to talking with the folks across the aisle, then the ones in front and in back and before long we were exchanging recipes, talking about Grange meetings and even comparing husbands."

"And I tell you, Jim," Sam's voice now, "one of the nice things about the trip was that almost every one was from the farm just like us. I thought maybe most of them would be city folks, but we soon found if they weren't farmers now they had been at one time."

No Worries on This Tour

"And then we didn't have to worry about tickets or changing trains or anything. The Tour Manager from the Pennsylvania Farmer office and the railroad men had everything planned so that all we had to do was enjoy ourselves, and we sure did that."

There didn't seem to be a stopping place to Sam's and Molly's descriptions of their trip and they were startled to hear the clock strike ten. Then there was a great flurry of leave-taking and with the promise that Sally Ann and Jim would come over soon, the guests hurried off through the zero night, the flashlight and lantern casting long shadows and their breath a frosty mist.

At the door, while Jim was busy helping Sam into his overcoat, Molly had whispered, "Do you think we did any good? Is he interested?"

And Sally Ann had whispered back, "I don't know but anyhow he didn't change the subject once."

"Call me up early tomorrow morning and let me know what he says," and picking up her flashlight, Molly vanished in the wintry night.

The door closed against an especially vicious gust of wind. Sally Ann

stood for a minute or two before the glowing kitchen fire; then called to Jim, who had returned to the sitting-room and his paper.

"Pa, you'll have to fetch the other lamp for me. I'm afraid to carry it on account of my rheumatiz. I want to set the bread and the oil's out of this lamp."

The kitchen was always Jim's favorite room and with his shoes at last removed, slipped feet propped on the grate of the coal stove, pipe filling the room with the aroma of tobacco, his thoughts went back over the evening's conversation.

Doggone, it would be nice to take a trip, and, as Sam explained it, guess he wouldn't be any bigger fool on the train than the next one. If Sam could manage, guess he could. Wouldn't have to worry any about getting lost or somebody stealing his ticket either if Pennsylvania Farmer handled all the details. Sally Ann was sociable and would have a great time with other women. Had a little money to spare. Might as well spend it in seeing other farm lands—and so his thoughts went on.

Jim Thinks It Over

Sally Ann's mind, too, was in a whirl while her crippled hands were busy with the dough. Jim was mighty quiet; seemed to be thinking about something. Probably figuring what work he'd do tomorrow. She and Molly had been foolish to think they could get Jim interested in spending money on a trip to Florida. Drat the rheumatism! Now she'd have to stop a minute until the pain left.

Jim had noticed Sally Ann rubbing the swollen wrists. When she resumed her task, for the first time Jim seemed to see her hands as they really were these days. Brown and

wrinkled, gnarled and knotted with hard work, rheumatism twisted; the old-fashioned wedding ring seemed almost too heavy for the bony finger.

And Sally Ann's hands used to be so pretty! Mighty proud Jim always was of them when she sang solos in singing school. He'd never told her how pretty they were—no use spoiling the women folks—but oftentimes he'd stopped reading or working just to watch her cuddling the babies or sewing some dainty thing.

Sally Ann's hands were always so comforting when you were sick. Light and soothing, they could coax away a pain in no time. Lots of neighbors could remember her warm handclasp. Even Jim knew how they felt when his heart was sad.

Funny he hadn't noticed when Sally Ann's hands had begun to look so different. Must have been that summer he was sick and she had gone out in the fields and worked like a man. Reckon that was it. Sally Ann had worked like a man all through the years just as hard as he had—maybe harder—what with the children, the house and outside work too and here he was refusing to put in a furnace and electric lights and make the work lighter for her.

With a thud his feet struck the floor, his pipe landed on the mantle and with two strides he was over beside Sally Ann who had just spread a woolen cover over the bread dough. "Sally Ann," he said, reaching for her crippled hands and holding them in a tight grip, "what did Doc Warner say when you went to see him yesterday?"

The Doctor's Prescription

Started and just a little frightened. Sally Ann was speechless. She hadn't told Jim she was going to see Doc and how did he know? Then bravely

"Well, he said there wasn't any medicine he could give folks whose bodies were worn out with too much work and not enough play. Wanted me to take a trip to New York and see Alice's new baby, or, he said, 'take a trip to Florida and come back with roses in your cheeks.'"

She ventured a swift glance at Jim. Perhaps it was the fire-light or just Sally Ann's imagination, but somehow his face seemed to become the old Jim—young, impetuous and gay—the man she had married.

"He did, eh?" he shouted. "Well, we're going to give it a try. Get Molly to go to town with you tomorrow and buy some new duds. And while you're there, call on that pesky furnace man who's been hanging around here for fifteen years. Tell him he can put in his best heater while we're in Florida. Next spring, soon's the frost's out of the ground, I'll set the poles for electricity."

One arm went around Sally Ann's stooped shoulder. Funny how awkward a fellow gets if he doesn't keep up that sort of thing through the years.

"Sally Ann, we're going to take that honeymoon trip we should have had forty years ago."

The Fashion Book

THE Winter Book of Fashions contains many attractive styles for the season—wool suits, coats, street dresses, afternoon dresses, aprons; dainty things for the tiny tots and the young set; lingerie, including the smart pajama ensembles; as well as some distinctive handwork and embroidery patterns for every purpose.

You will like the practical suggestions for gifts, the interesting discussion of fabrics and the points of design and the dressmaking guide that give to clothes real individuality and chic. Price is only ten cents. All patterns are ten cents, three for a quarter.

Send now for your copy. Address: Pattern Department, Pennsylvania Farmer, 7301 Penn Avenue, Pittsburgh, Pa.

HOW TO ORDER

Write plainly, giving pattern number and size. Address: Pattern Department, Pennsylvania Farmer, 7301 Penn Avenue, Pittsburgh, Pa.

All-Year Around Clothes



No. 6715.—Ladies' dress. Cut in six sizes: 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires 4½ yards of 39-inch material. For contrasting material 1-6 yard 39 inches wide is required cut crosswise. Price 15c or two for 25c.

No. 6720.—Ladies' house frock. Cut in five sizes: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 4½ yards of 39-inch material. For contrasting material 1-6 yard 39 inches wide is required cut crosswise. Price 15c or two for 25c.

No. 6723.—Girls' dress. Cut in four sizes: 6 months, 1, 2 and 3 years. A 2-year size with wrist length sleeves requires 1½ yards of 39-inch material. With short sleeves 1½ yards is required. To trim with bias binding requires 2 yards 1½ inches wide. Price 15c or two for 25c.

No. 6762.—Girls' undergarments. Cut in four sizes: 2, 4, 6 and 8 years. To make the set for a 2-year size requires 2 yards of 39-inch material. Price 15c or two for 25c.

No. 6771.—Ladies' dress. Cut in five sizes: 34, 36, 38, 40 and 42 inches bust measure. A 38-inch size requires 4½ yards of 39-inch material. For contrasting material 1-6 yard 39 inches wide cut cross-

Have You Confidence in the Poultry Business

By H. C. KNADEL

THE past months have been indeed most trying ones not only for the farmer but for the wage earner in the city. The great army of poultry raisers throughout the country are now face to face with a difficult problem. With the price of eggs the lowest in several years, with poultry meat selling at pre-war prices, what can the future hold?

Let us think back a little, over a decade ago when prices for poultry products were very low—what happened then? Eggs were sold on the market at less than the cost of production. Many poultrymen became discouraged. Wholesale slaughter of hens resulted. Many persons went out of the poultry business altogether. Others reduced their flocks considerably.

We were told there was no money in the poultry business. There were those, however, who had faith in the future, had faith that a great industry would right itself, and coupled with that faith they had the courage to stick with the problem and strive for a solution.

What Happened

All of this is history, but you will know what happened. The thinking poultrymen culled their flocks severely, keeping only the most productive birds. They maintained only highly bred breeding flocks. The following spring they raised about the same number of chickens as they had been accustomed to raise in previous years.

Conditions changed rapidly. Those who were easily discouraged because of low prices hatched or purchased few chicks. In the fall pullets were commanding a high price. They were not to be obtained. The better poultrymen needed all they raised to replenish their flocks. The "follower" was disappointed and unable to cash in on the high prices. It is so easy to succumb to failure. It requires faith to face discouragement and still come up smiling.

I once met a man who for years had labored as a fireman on a railroad. He and his wife saved their money and invested it in the poultry business. At last their dream had come true. Several thousand chicks were raised and the pullets placed in winter quarters. Disease broke out and wiped out the entire flock. Not discouraged, but rather determined to win, the man got back his job as a fireman until such time as he could gain sufficient funds to stock up his poultry plant. With this accomplished the future looked bright, but just around the corner was further discouragement. A severe windstorm swept over this farm and leveled or unroofed every building and killed several hundreds of chickens. Once again back to the railroad, followed later with back to the farm. Through adversity and failure this man kept a cheerful outlook on life. Such spirit cannot be dampened and he was bound to win, as he did.

Behind the Scenes

James Allen in his book entitled "As a Man Thinketh" says, "The thoughtless, the ignorant and the indolent seeing only the apparent effect of things and not the things themselves, talk of luck, of fortune and chance. They do not know the darkness and heartaches; they only see the light and joy, and call it 'luck'; do not see the long and arduous journey, but only behold the pleasant goal and call it 'good fortune'; do not understand the process, but only perceive the result and call it 'chance.'"

More ideas per inch!

And, every idea proved out in the poultry yard. Articles by such men as Wyckoff, Lee, Platt, Moreland, Huttar, Robinson and many others every month in

The Poultry Item

Be sure to get the next 7 issues—each with a Success Secret, telling how to make more money from poultry. Read also how to have most eggs for present selling, how to market all poultry products at higher prices, how to save money on feeds. Send coupon today.

The Poultry Item, Sellersville, 713, Pa. Enclosed is 10c. Send me Poultry Item with the seven "Secrets" articles.

Name _____ Address _____

Navy Brand Concentrated Buttermilk
From Tuberculin Tested Cows
28 per cent milk solids, 10 per cent lactic acid, thick as cream with no foreign ingredients. Reduces toe-picking and lessens danger from overfeeding. Increases egg production and promotes fertility and health. Good for chicks, broilers and laying hens. Sold direct from the factory in lots of about 455 lbs. Half barrels, about 900 lbs. Write for prices.
TITUSVILLE DAIRY PRODUCTS CO., TITUSVILLE, PA.

LOTS OF EGGS BIG EGGS
and—
Hoyville Accredited White Leghorns have been bred for over ten years to produce big eggs and lots of them. Get our free catalog. It tells all.
10 FREE CHICKS
Order before March 1st. Get 10 free chicks with each 100. \$1.00 down boxes order. Pay when you get chicks. Write today for catalog.
HOYVILLE ACCREDITED WHITE LEGHORNS
117 Main Street Hoyville, Ohio

OUR FREE BOOK
will be mailed to you if you will write for it NOW, telling all about our 1931 Chick and Brood Chickens from R. O. P. and Pedigreed Males and Choice Females. Read what others say about our Hardy Chicks and Great Layers—they will do as well for you.
Linesville Hatchery, Linesville, Pa.

BROILER—RAISERS
SHIPPING CRATES LOANED FREE
SHIP YOUR LIVE BROILERS and other poultry to New York's Oldest Live Poultry House. Est. 1885. We are bonded commission merchants. Birds fed returns made daily. Highest prices. Our outfit is unlimited. Inquire about us. Write for quotations, rates, cage shipping instructions. Holidays, cash. Order P.O. KRAKAU POULTRY CO., Inc. West Washington Market, New York City.

FAIRMOUNTS BETTER PURE FLAKE BUTTERMILK
Distributed by Omwake Bros., Greencastle, Pa. ASK YOUR DEALER.

BIG CHICKS—BIG EGGS—BIG PROFITS!

With FRECH'S JUMBO LEGHORNS

Jumbo Chicks come from Ohio's largest exclusive Leghorn breeding farm, where 5000 trapped hens of the most aristocratic heavy-laying ancestry supply the 24 to 26-egg eggs necessary for these splendid chicks. The breeding pens are headed by males from trapped dams, with R. O. P. records of 280 to 285 eggs.

MAIL COUPON FOR OUR NEW FREE CATALOG
It tells how real money is being made with JUMBO CHICKS.

FRECH'S LEGHORN FARM, Route 4-P, Dayton, O.

Send me your beautiful new catalog describing your JUMBO White Leghorns, and prices:

Name _____ Address _____

Important! We guarantee 100 percent live delivery of your order.

GASSON'S LARGE TYPE

S. C. WHITE LEGHORNS will appeal to Poultry Raisers who wish to make a REAL PROFIT . . .

Breeding Plant in the Middle States, 55 acres, 61 buildings, \$175,000 investment—all devoted to poultry. 3,000 pedigreed birds on our farm, 1,000 trapped under Ohio R. O. P. Supervision. Eight consecutive years of blood testing, official records from 200 to 310 eggs. Every male in all our matings has a pedigree. Large Chalk White Eggs weighing 24 to 28 oz. are the result. For real profit raise Gasson Strain Chicks—the best your money can buy. Day-old chicks and matured pedigreed cockerels. Write for our 48-page catalog.

GASSON'S POULTRY FARMS, Box B, Versailles, O.

THE YOUNG PEOPLE

Grange Members Can Help

By MARGARET RUTH WARNER

Editor's note: This essay won fifth prize in the recent National Grange Highway Essay Contest. Margaret is a Pennsylvania girl, Four-H Club and Jackson Grange, Butler county, member.

EVERY Grange member uses the highway for some purpose or other and they are all interested in making a safe place to drive or walk. Every Grange member can aid in highway safety by putting into practice the two primers of safety. They are: the A. B. C. which means to Always Be Careful; and second, the three R's which means to Ride the Road Right.

There are three factors that contribute to accidents and they are your car, yourself and others. The vehicle should be properly equipped with good brakes, windshield wiper, mirror, good lights, horn, and the license plates should be securely attached. A great many accidents could be avoided if the car was properly equipped. A person should not drive a machine who has less than 50 per cent normal vision with glasses, or who has a mental or physical disability affecting control, or any one who is an habitual drunkard or drug addict.

Teach Children Danger

There are seven things which Grange members can do to aid in highway safety. They are:

Children should be taught the dangers of the highway at an early age. Statistics show that about one-third of our traffic fatalities are children from four to nine years of age. The following principles should be taught the children:

1. Walk on the left side of the road approaching traffic.
2. When in groups walk single file.
3. Before crossing the street or highway look first to the left then to the right.
4. Do not play games along the street or highway.
5. Do not roller-skate on the street or highway.
6. Do not heedlessly run into the street or highway after a ball or some other toy.
7. Do not hitch on to trolley cars, automobiles, or wagons, with your sleds or wagons.
8. Do not hold an umbrella in front of you in such a manner that it will obstruct your view of the road in front of you.
9. When riding a bicycle keep close to the right side of the road in front.
10. Do not beg or accept a ride from strangers.

Proper Equipment

Motorists should watch out for the children. The greatest number of child accidents occur between the hours of four to nine in the afternoon. When driving in residential districts

keep the speed down to twenty miles an hour or less and cooperate with the Safety Patrols organized in the schools to help children cross the street safely.

The second thing to aid in highway safety is to drive on the right hand side of the road. Not only the law but good judgment dictates that you drive on the right hand side of the road. This should be remembered particularly where the white lines are painted on the surface for they indicate the approach to a traffic hazard.

The third thing is to have the vehicle properly equipped. Your registration plate can be lifted, and your car ruled off the highways, if its equipment is defective. Good brakes will prevent many accidents.

Obeey Light

Fourth: the operator should give signals as a warning when about to turn, back, slow down, or stop, indicating his intentions by some approved mechanical or electrical device or by a single cautionary signal by extending the arm well outside of the vehicle.

Fifth: obey all warning signs for they are all for our protection. You will find these warning signs at cross roads, narrow bridges, dangerous hills, dangerous curves and at railroad crossings.

The sixth thing is to always be on the alert. Always watch the road in front of you and never try to see what is going on in the back. Always be on the lookout for the road-hog for he not only has bad brakes and glaring lights but he also cuts in and out of traffic at dangerous times and places and passes on curves and hills, and he also takes his half out of the center. He is the person who is inconsiderate at all times.

The seventh thing that all Grange members can do to aid in highway safety is to obey the traffic lights. They are for our safety and every Grange member should obey them.

If we as Grange members are courteous, considerate and cooperative at all times we can surely aid in highway safety.

Sweet Corn Club

THE Mercer County Boys' and Girls' Sweet Corn Club had its final round-up a few days ago when the sponsors of the club entertained the club members. The club was organized last spring by County Agent W. S. Hagar in cooperation with the Sharon Kiwanis Club and Mr. R. E. Springer, principal of the Hickory Township High School, with a total membership of 26, of which 22 completed their project.

Each member was given approximately one quart of seed of each of



Free-Hand Drawing

By B. Cecil Pettit, Pennsylvania.

three varieties. The members as far as possible planted their corn on May 10, and all but one member had his corn damaged by late frost, but even with the extremely dry weather the results of the club were very satisfactory.

The winner of the contest having the largest financial return was Donald Dixon who had a gross income from his one-third acre of \$95.65 with expenses which included labor, fertilizer, manure and rental of land,

total \$35.50, giving him a net profit of \$60.15.

The net profit of several high members were \$28.15, \$27.45, \$26.30 and \$25.73, graduating on down to two members of the club showing a small net loss due to complete crop failure owing to weather conditions. An exhibit of ten ears was put on in connection with the Sharon curb market, at which time Mr. W. B. Nissley from State College judged the corn, as the final prizes which were awarded were based upon condition of the crop in the field, including cultivation, etc., exhibit score and report score.

Winter

By Vivian Staats, West Virginia

Wintertime is drawing near,
The breeze blows cold and chill,
The black bare trees like skeletons
Stand guard upon the hill.

Within a house a ruddy fire,
Upon the hearth is glowing,
The while outside, around the house,
A lusty wind is blowing.

Oh, sure, within 'tis warm and bright,
The wind roars outside, an icy blast,
The children round the fire laugh happily
For wintertime has come at last.

Little Folks' Corner

A Narrow Squeak for Timmy Twitchet

By RUTH PLUMLY THOMPSON

(Continued from last week.)

THE cook, in a great hurry to prepare supper, had left the flour and sugar containers open and spilled enough coffee and tea to last Timmy for months. Chuckling with satisfaction, he filled the small boxes and bags he had brought along with these useful commodities and stowed them in the bottom of the tobacco sack.

Next he nibbled a hole in a box of crackers and another in a box of cereal and added a generous supply of each to his stores. The lid was off the raisin package and Timmy who used raisins for prunes took several mouse pounds of the tempting blue fruit, also a measure of cocoa from the chocolate box. Then, well satisfied with his groceries, Timmy peered out the dresser door to see what the chances were for some fresh meat and fruit. Just as he did so the kitchen light went out and Timmy heard the heavy tread of the cook on the stair. Snapping on his flashlight, Timmy crept down from the dresser and tiptoed cautiously across the kitchen.

A Prisoner

"What luck, what precious luck!" murmured Timmy, clasping his paws, and, no wonder! The refrigerator door had not caught and was open nearly two inches. Turning up his coat collar, Timmy swung himself upward and without a moment's hesitation stepped inside. Working as fast as he could, for the refrigerator was uncommonly damp and chilly, Timmy helped himself to a mouse pound of butter, a small triangle of cheese wrapped in silver paper, and a bunch of white grapes.

Then he filled one of his jars with cold peas for they make such splendid mouse potatoes. "And the grapes, cut in half will be excellent for melons," exclaimed Timmy, cramming them happily into the tobacco sack. On a plate on the top shelf he found cold chicken and joyously selected the chicken heart and liver for his Sunday roasts. He was just pulling a slice of dried beef from the package when a thud, slam and terrific jolt sent him sprawling into a saucer of mashed potatoes.

"Mouse alive!" gasped Timmy Twitchet brushing the potatoes from his clothes. "Mousealive!" The cook returning for her specs had slammed



Drawn by L. M. Alcorn, Pennsylvania.

the refrigerator door, imprisoning poor Timmy in the cold vaultlike interior.

Timmy, buttoning up his coat, thought of all the sad stories he had heard of two legs perishing at the Poles. "I shall freeze stiff and never reach home at all," shuddered the horrified mouse, wrapping himself up in the slice of dried beef and stamping his feet to keep warm. Then vigorously he went through all the exercises he had learned in Professor Toggletail's gymnasium.

They helped a little, but not much. Discarding the dried beef, Timmy crept between two flannel cakes on a blue plate and tried to pretend he was at home in the comfortable, doll four poster. But it was no use. The flannel cakes were cold and clammy and the cold began to penetrate to Timmy's last bone. Jumping up, the shivering mouse blew his paws and spun round like a dervish to keep from freezing, and at last growing too cold and weary to do even this he sat sadly down on the edge of a saucer and prepared for the worst. First Timmy composed his face in a resigned smile for he was anxious to freeze with as pleasant an expression as possible and look well at his own funeral. Just as he was thinking sorrowfully about this depressing occasion a wedge of light appeared suddenly under the refrigerator door.

(To be continued.)

Scenes You'll Enjoy on the Pennsylvania Farmer Florida-Cuba Tour



1. West Palm Beach is located on the Lower East Coast of the Florida peninsula, well within the tempering influence of the warm Gulf Stream. Throughout the year the temperature varies but little, averaging 72 degrees in winter and 85 degrees in summer. Records show that 300 days of sunshine fall each year. There's hardly a day in the entire year that you'll not find some one lying on the beach, drenched in sunshine.

Here the Pennsylvania Farmer tourists will be on Monday, February 9th, seeing gorgeous flowers, flaming vines, coconut palms and countless strange species of sand and sun.

2. Even the alligators won't be safe from our inquisitive eyes. When in the Miami section, perhaps we shall find time to see some of these captive alligators and their Seminole Indian keepers.

3. Besides the beautiful Bok Bird Sanctuary and Singing Tower near West Lake Wales, we shall see innumerable acres of orange and grapefruit trees and grove-bordered lakes. The picture shows a citrus nursery here.

4. Silver Springs has been called "the under-water garden of the gods." The waters are of constant temperature—72 degrees every day in the year—and as clear as crystal, permitting us to see small objects 80 feet beneath the surface. We shall explore this beautiful lake and its fish inhabitants February 5th, a trip which we shall long remember.

5. The great Tampa Fair, an exhibition of Florida's agricultural products, is always a fascinating experience to Northern tourists. This sectional view of the Manatee county exhibit at last year's South Florida Fair is only a small part of the many interesting things to be seen at Tampa when we visit the Fair on the 7th.

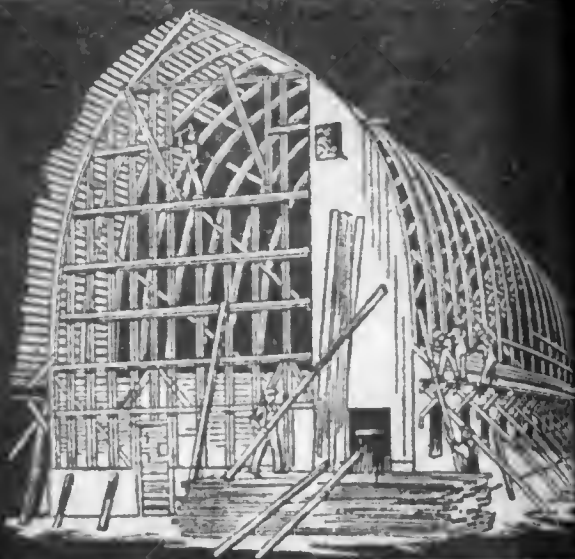
6. In Sarasota there has been built by Mr. and Mrs. John Ringling the second largest Art Museum in the United States, housing a collection of paintings, sculpture and works of art unsurpassed. After we have become acquainted with Mr. Ringling's circus animals at their winter quarters, we shall elevate our minds to a higher level and visit this imposing structure on Friday, February 6th.

These are just a very few of the many interesting sights you will see if you go with the Pennsylvania Farmer Florida-Cuba tourists on February 3rd-14th, 1931. Further information about the trip will be found in our 16-page booklet which we shall be glad to send you entirely free. Fill in your name and address on the coupon found on page 9 of this issue.



DON'T

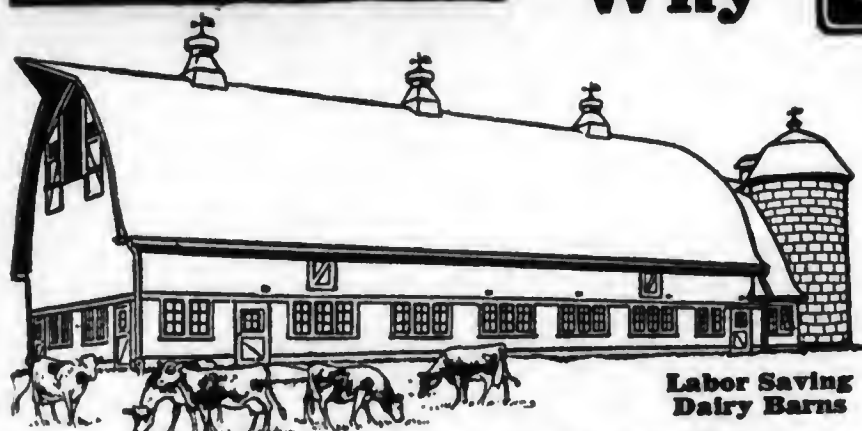
Build-Remodel
Ventilate or Equip
A Hog House, Dairy Barn
Horse Barn or Poultry
House Until You Get
Our Free Book



**Tells
Why**

Jamesway

**Costs
Less**



Labor Saving
Dairy Barns

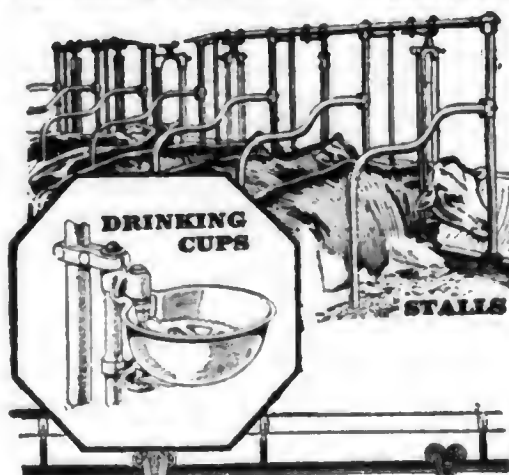
FREE How to Save Money ON MATERIAL

The Jamesway book which we send you FREE will show you how to save money in many ways when you are building, remodeling or equipping any farm building. Our many years of experience in planning and designing practical, convenient layouts for farm buildings has taught us how to plan buildings to save cost of material and construction. We can also tell you how best to plan your building so as to

save steps and save work at chore time. We know just how every door, every window, every stall, should be placed and the whole general arrangement should be made so that the light, air, heat and moisture will all be properly taken care of. In short, the Jamesway service will save you all regrets and costly mistakes.



Ventilating Systems

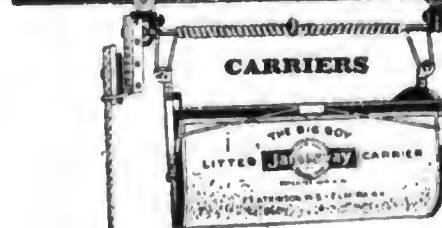


DRINKING
CUPS

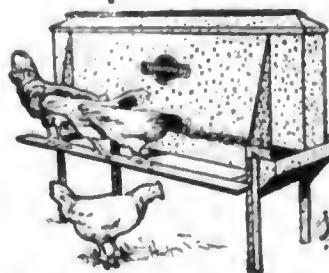
STALLS

Jamesway Equipment COSTS LESS

Our FREE Book also tells about the complete line of Jamesway Equipment—Stalls, Stanchions, Drinking Cups, Litter Carriers, etc., for the cow barn. Troughs, Waterers, Pens for the hog houses. Feeders, Nests, Waterers, Incubators, Brooders and Baby Chick Equipment for the poultry house. Here again our extensive experience in designing and manufacturing enables us to put out BETTER designed—MORE practical—LONGER lasting equipment for the cow, the horse, the hogs or the hens. Jamesway offers you the most complete line of every kind of labor-saving, money-making equipment for any farm building. That's why Jamesway equipment always gives better service and costs less in the long run. Get our FREE Book and see for yourself.

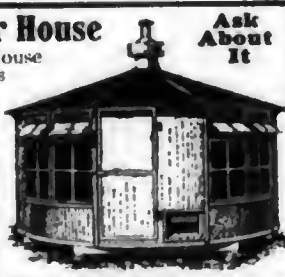


CARRIERS

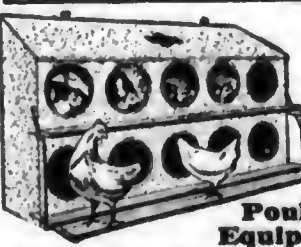


New Jamesway Brooder House

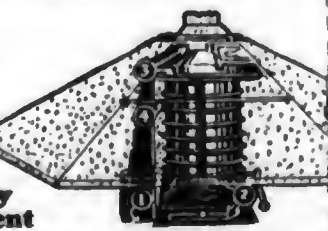
Before you buy or build a Brooder House investigate the New Jamesway. It's entirely different—head and shoulders above them all. Has insulated roofs and walls—metal window sashes—transom ventilating windows—100% sunshine on the floor—special screen door—complete built-in ventilating system—smoke stack built into roof ventilator—sealed joints—no cold corners—no drafty spots. Comes knocked down in sections—easy to erect. It is built right, but is not expensive. Just the kind of Brooder House YOU want.



Ask
About
It

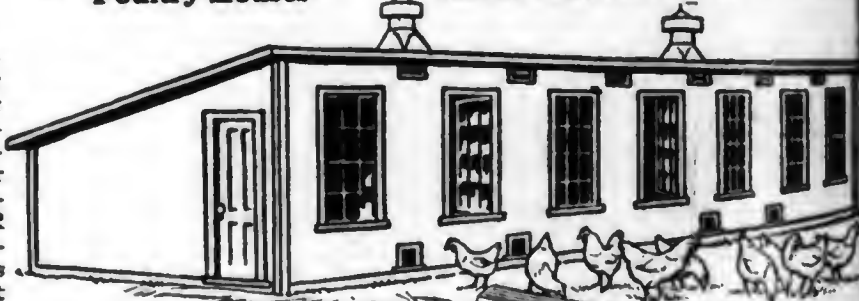


Poultry
Equipment



Poultry
Equipment

Time Saving Money Saving Hog and Poultry Houses



Complete Ventilation
Systems for Barns
and Poultry Houses

and Saves Costly Mistakes

If you are thinking of building, remodeling or ventilating a cow or hog barn, hog or poultry house—or if you are considering the purchase of labor saving, time-saving equipment for such buildings, by all means fill out the coupon below and let us send you FREE, our valuable Jamesway Book.

Before you spend a dollar on plans, material or equipment for building, remodeling or improving any farm building, get this FREE Book and see how Jamesway helps farmers save a lot of money on materials and construction.

It makes no difference what kind of changes or improvements you are planning in any farm building, this Jamesway book will show you the most economical way and save you a lot of costly mistakes.

Planning New Buildings

Our free book tells how Jamesway farm engineers and service department will help you plan your buildings to give you exactly the arrangement you want—convenient, handy, yet save you a lot of money in construction and material cost.

Remodeling

Get the most out of your old building. The Jamesway Book and the Jamesway Service Department will show you how to get the most for your money on any remodeling job.

Jamesway Ventilation

Find out how Jamesway Engineers have perfected the Ventilation System for Barns and Poultry Houses so to keep them warmer in winter—cooler in summer—drier the whole year round—prevent disease—increase production and make you more money. Send the coupon below and find out all about it.

Mail Coupon Today!

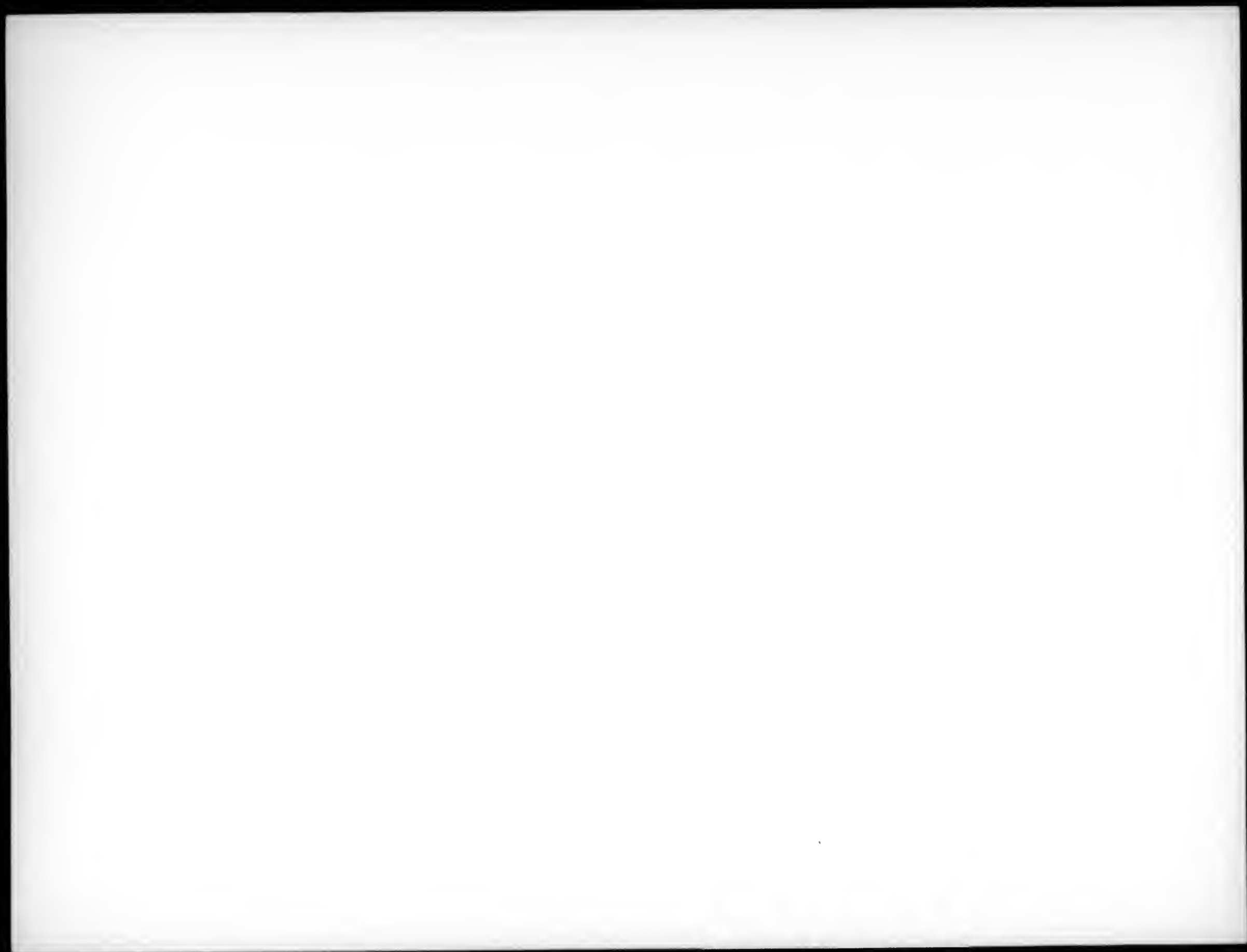
Learn all about Jamesway's complete service. Check coupon, telling us what you are interested in, and we will send you the Jamesway book which tells you just what you want to know.

Mail Coupon to Office Nearest You

JAMES MFG. CO., Dept. 4935
FL. Atkinson, Wis. Elmira, N. Y. Minneapolis, Minn.
JAMESWAY LTD., Weston, Ont., Canada
Send me your New Jamesway Book. I am interested in
☐ Building ☐ Remodeling ☐ Equipping ☐ Ventilating
☐ Cow Barn ☐ Horse Barn ☐ Silo
☐ Hog House ☐ Poultry House ☐ Building Tile
I would also like information on ☐ New Heating System for Poultry
House ☐ New Pointed Arch Poultry House ☐ Dairy Barn Equip-
ment ☐ Poultry Flock Equipment.

Name
P. O.
R. F. D. State

**End of
Volume**



**CONTINUED
ON
NEXT REEL**

END OF REEL
PLEASE
REWIND

